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Gender and Education: A Qualitative Study of Women's Experiences at Selective Women's Colleges

Staci H. Zake

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DePaul University
College of Education

**GENDER AND EDUCATION:
A QUALITATIVE STUDY OF WOMEN'S EXPERIENCES AT SELECTIVE WOMEN'S COLLEGES**

A Dissertation in Education
with a Concentration in Curriculum Studies


by
Staci H. Zake

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Submitted in Partial Fulfillment of the Requirements
For the Degree of Doctor of Education


June 2017

We approve the dissertation of Staci H. Zake.



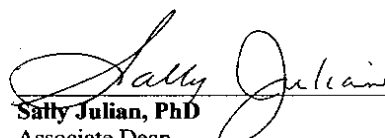
Karen Monkman, PhD
Professor
DePaul University
Chair of Committee

3-27-2017
Date



Amira Proweller, PhD
Associate Professor
DePaul University

3/27/17
Date



Sally Julian, PhD
Associate Dean
DePaul University

3/27/17
Date

ABSTRACT

This study examined women's experiences in a single-sex academic environment to help us better understand broader issues in higher education related to the history of educating women and the role of women's colleges within the U.S system. This dissertation research moved beyond existing research about elite single-sex schooling to better understand the experiences for graduates of second tier women's colleges in relation to a women-centered environment. Findings support that female students attending second-tier women's colleges experience the single-sex environment very similarly to peers attending top tier women's colleges and can end up in similar places professionally as their peers at top tier women's colleges.

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CHAPTER 1: INTRODUCTION

This study asked questions about how women's experiences in a single-sex academic environment can help us better understand broader issues in higher education related to the education of women and the role of women's colleges within the U.S system. A great deal of research has been conducted about the benefits of single-sex college environments for Seven Sisters¹ graduates indicating that women's colleges socially and professionally position alumnae ahead of peers from coeducational institutions (Tidball, 1973; Hall and Sandler, 1982; Riordan, 1994; Pascarella, 1997; Langdon, 2001; Kinzie, 2007; Clarke, 2011); however, existing research about the benefits of single-sex schooling for women beyond the prestigious original Seven Sisters is limited.

This dissertation research moved beyond existing research about elite single-sex schooling to better understand the experiences for graduates of second tier women's colleges, those in the second tier of a three-tier system categorized by Carnegie in their three-tier typology of "more selective," "selective," and "not ranked". Recognizing the differences in selectivity between top tier and second tier Carnegie classifications, it was useful to consider experiences of second tier alumnae relative to the broader issues facing all women in higher education. The purpose of this study was to understand women's experience in single-sex educational environments and how women's colleges position women in society post-graduation.

¹ The "Seven Sisters" refers to the women's colleges that comprised the original seven-member consortium of women's colleges of Mount Holyoke, Smith, Vassar, Wellesley, Radcliffe, Barnard, and Bryn Mawr. These are elite colleges that were associated with the previously male-only Ivy League colleges of Brown, Columbia, Cornell, Dartmouth, Harvard, Yale, and the University of Pennsylvania.

Combining concepts developed by Joan M. Ostrove (2003), Ostrove and Abigail Stewart (1998), and Wendy Luttrell (1994) through separate bodies of research related to gender, race, and social class, I used a conceptual framework of *Belonging and Becoming* as a way to explore women's educational experiences in a stratified women's college environment. Where Ostrove (2003) asked if elite (top tier) institutions of higher education are navigated differently by people from different class backgrounds, it was equally relevant to ask the same question of the second tier women's college population. By understanding whether women of different class backgrounds navigate second tier women's colleges the same or differently, we now better understand their experience in relation to comparisons in the literature about women attending elite women's colleges.

The most selective women's colleges have long been viewed as elite spaces reserved for the wealthy and affluent. Selective women's colleges are less prestigious by their second tier definition and sometimes inaccurately presumed to comprise less prepared students. Gaining a better understanding of similarities and differences of experience among top tier and second tier colleges expands our knowledge about the role and impact of women's colleges. Existing research has predominantly focused on the benefits of single-sex college environments for Seven Sisters graduates, thus creating a gap to explore the experiences of graduates of selective women's colleges (i.e. second tier).

Research Question

The following research question guided my dissertation:

RQ: How do female students attending selective/second tier women's colleges experience the single-sex environment?

Overview

The literature review (chapter 2) provides an opportunity to create context through an understanding of the history and evolution of women's colleges, institutional differences among them, and why women's colleges still matter. By examining the history of higher education for women we have a better understanding of historical and political issues of access and selectivity, and how socio-economic status influences educational outcomes for women. The most selective women's colleges have long been viewed as elite spaces reserved for the wealthy and affluent, as presumed by their admissions criteria which can often be met by only the most privileged applicants (AP courses, test scores, cost of tuition and board, etc.). Selective women's colleges are less prestigious by their second tier definition and sometimes inaccurately presumed to comprise less prepared students. Gaining a better understanding of similarities and differences of experience among top tier and second tier colleges expands our knowledge about the continued role and impact of women's colleges (do they still matter?) as related to college impact, student cognitive development, the concept of a women's-centered curriculum, and the ever changing role of gender in education.

Following the literature review is a comprehensive plan for research (chapter three) in which I explain the conceptual framework; methodology; and methods, including in-depth sample selection, recruitment of participants, data collection, analysis, quality, ethical considerations, and positionality. This research used a constructivist grounded theory utilizing a three-part interview method of data collection (Seidman, 2013). Interview based grounded theory methods was the best choice for this study as it enabled me to understand what the

research participants lives are like and how they explain, and make meaning of, their experiences so that we can learn about them and their world (Charmaz, 2014).

Findings support that female students attending second-tier women's colleges experience the single-sex environment very similarly to peers attending top tier women's colleges. The main conceptual ideas to emerge from this piece of the study relate to the concept of belonging and becoming, the experience of first generation students, and the similarities and differences between top tier and second tier women's colleges.

Appendixes of the IRB approval letter, interview guide, and a list of current women's college's are provided. References are available at the end.

CHAPTER 2: LITERATURE REVIEW

As stated in chapter one, the literature review is positioned to help us better understand the broader issues in higher education related to the history of educating women and the role of women's colleges within the U.S. system. The following review of pertinent literature creates context for this study through an understanding of the history and evolution of women's colleges, institutional differences among them, and why women's colleges still matter.

History of Higher Education for Women

The roots of opposition to college education for women are long and deep. As early as 1790, "a good education for ladies was that which renders them correct in their manners, respectable in their families, and agreeable in society...that education is always wrong which raises a woman above the duties of her station" (Woody, 1929, p. 151). Furthermore, it was asserted, "as for training young ladies through a long intellectual course, as we do young men, it can never be done. They will die in the process..."(Woody, 1929, p. 154). The idea was that college coursework, along with out of school expectations such as piano, would force the intellect of women beyond their physical capacity, leaving them feeble in the process. While it is currently evident that women are successful doing college work, the belief in their mental inferiority and physical weakness persisted for almost another one hundred years. Only through the visionary leadership of late 19th century educational leaders such as Catherine E. Beecher, Duncan Campbell, and Z.C. Graves, were the merits of educating women viewed as a positive advancement (Woody, 1929; Harwarth, Maline & DeBra, 1997).

Historically women's colleges were founded to create access for women who were excluded from the higher education system in America (Woody, 1929; Newcomer, 1959; Astin, 1977; Langdon, 2001). By 1950, more than 300 women's colleges were in operation. The idea of college education for young women in the United States evolved out of prominent female seminary institutions. The influence of many prominent female seminary institutions of the time helped to make women's college education a possibility (Woody, 1929, p. 143).

This movement, led by Catherine E. Beecher, leader in the Northern seminary movement and sister of abolitionist Harriet Beecher Stowe, advocated that to be considered a legitimate college, institutions must possess a sense of permanence with "endowments, buildings, a library, and other facilities, with a corporation whose duty it is to perpetuate the institution on a given plan" (Woody, 1929, p. 143). In 1851, she published *True Remedy for the Wrongs of Women* where she also insisted upon a regular course of study where pupils were defined by class year, provided with a liberal education curriculum, and a clearly defined division of responsibilities between faculty and administration, thus freeing professors from presidential influence or control (Woody, 1929, p. 144; Harwarth, Maline & DeBra, 1997). This was; however, a challenge.

Those female institutions in our land, which are assuming the ambitious name of college, have, not one of them, as yet, secured the real features which constitute the chief advantage of such institutions. They are merely high schools, with one or two principals, employing subordinates, who are entirely subject to the control of the head of the institution. (Beecher, as quoted in Woody, 1929, p. 144)

Important to the history of women's education is an understanding about how institutions dedicated to their education evolved. The following sections chronicle the movement from female seminary toward a model of liberal arts education that we recognize

today, as well as the evolving nature of women's access to higher education over a time period of nearly two hundred years.

From Female Seminary to Women's College

As early as 1851, advocates of colleges for women in Albany, New York, debated the issue and chartered the Auburn Female University in 1852. The ideas stressed in this movement were (1) a higher grade of education than yet provided, (2) creation of a permanent institution, (3) endowments, and (4) a designated college faculty empowered with the academic freedoms associated with permanent institutions (Woody, 1929). Motivated by financial incentives from Elmira, New York, the college relocated, and in 1855 under a new charter, was renamed Elmira Female College. Education equal to that provided for men was the objective, and the first degrees were conferred in 1859 (Woody, 1929). During the same time period, advocates in Winchester, Tennessee, were also taking up the cause to provide a college education for women equivalent to that offered at men's colleges. Patterned after Amherst College, Brown University, and the University of Virginia, Z.C. Graves and the trustees of the Tennessee and Alabama Female Institute, chartered in 1851, the institution that would be renamed in 1857 Mary Sharp College after Mary Sharp, its largest donor who was deeply dedicated to the "freedom of women's minds as well as freedom of the Negroes" (Woody, 1929, p. 142). Mary Sharp College conferred three Bachelor of Arts degrees in 1855.

The debate for equal education for women in the United States formally dates to 1825 and Duncan G. Campbell of the Georgia state legislature (Woody, 1929). An early founder of schooling for girls, and ardent advocate of educational equality, Campbell proposed a bill in the 1825 session "to establish a public seat of learning in this state for the education of females"

(Woody, 1929, p. 139). The bill was defeated in the Senate, signifying a lack of public support for the equal education of women and the creation of a permanent institution where women could have the same educational advantages as men (Woody, 1929).

Thomas Woody, widely accepted as the first author of a comprehensive anthology of women's education in the United States, *A History of Women's Education in the United States* (Newcomer, 1959; Harwarth, Maline & DeBra, 1997), further positions the above-mentioned Georgia debate as passed to Duncan Campbell's son-in-law, Daniel Chandler, who in 1834, addressed the University of Georgia,

Wherein he advocated, in enthusiastic terms, that the same educational facilities should be accorded to women as men. His address was printed and distributed and must have been influential if one may form an opinion from the numerous references made to it and the fact that it was widely and favorably quoted. (Woody, 1929, p. 139)

Two years later, the legislature chartered the Georgia Female College (1836), led by George F. Pierce, its first president. Reflective of the times, most of the new colleges for women were led by men.

It was not until 1860 when Matthew Vassar took action toward a fully endowed institution for the education of women under the guise that it was his life's purpose (and God's will) to establish and endow a college for the education of young women "which shall accomplish for young women what our colleges are accomplishing for young men" (Woody, 1929, p. 148). Vassar College was chartered in 1861 and opened in 1865 (Vassar College, 2014). In accordance with Sophia Smith's will and designated funds from her estate, Smith College followed with "the establishment and maintenance of an institution for the higher education of young women" (Woody, 1929, p. 149). Smith College was chartered in 1871 and opened in

1875 (Smith College, 2014). Wellesley College was first incorporated as the Wellesley Female Seminary, but in an 1873 act of the legislature, was changed to Wellesley College and opened its doors as such in 1875 (Wellesley College, 2014).

Wellesley College's founder, Henry F. Durant, was convinced "that the social questions of the future could not be answered save by the assistance of enlightened women, whose influence in the public schools, even then, was a great factor. To prepare them for this larger sphere into which he foresaw they would go in ever greater numbers, he believed they must be educated as thoroughly as men" (Woody, 1929, p. 149). Soon to follow in the footsteps to create academically equal institutions for women were Mount Holyoke College (1837 seminary/1893 college), Mills College (1871 seminary/1885 college), Bryn Mawr College (1880), Barnard College (1889), and Randolph-Macon Women's College (1891) (Mount Holyoke, 2014; Mills College, 2014; Bryn Mawr College, 2014; Barnard College, 2014; Randolph College, 2014). Vassar College became coeducational in 1969 and Randolph-Macon in 2007 (Vassar College, 2014; Randolph College, 2014). Ingham University founded in 1835 and closed in 1892, was the first and only women's university in the United States (Woody, 1929). (See Table 1.)

Table 1. Women's Colleges by Year Chartered

Year Chartered	Institution
1835	Ingham University The first and only women's university in the United States. Closed 1892 (Woody, 1929)
1836	Georgia Female College (Woody, 1929)

1851	Tennessee & Alabama Female Institute Renamed Mary Sharp College in 1857 (Woody, 1929)
1852	Auburn Female University Relocated and renamed Elmira Female College in 1855 (Woody, 1929)
1861	Vassar College (Vassar College, 2014, http://collegerelations.vassar.edu/history/)
1871	Smith College (Smith College, 2014, http://www.smith.edu/about-smith/smith-history)
1873	Wellesley College (Wellesley College, 2014, http://www.wellesley.edu/about/collegehistory)
1880	Bryn Mawr College (Bryn Mawr College, 2014, http://brynmawr.edu/about/history)
1885	Mills College (Mills College, 2014, http://mills.edu/about/mission_and_history.php)
1889	Barnard College (Barnard College, 2014, http://barnard.edu/about/womens-college/history)
1893	Mount Holyoke College (Mount Holyoke College, 2014, http://mtholyoke.edu/about/history)
1891	Randolph-Macon Women's College (Randolph College, 2014, http://randolphcollege.edu/about/history-and-legacy)

Source: Adapted from Woody (1929) and institutional website pages for each college as cited above.

The opening of Smith College in 1875 provides the first glimpse to see a women's college propose a course of study almost identical with that of elite men's colleges (Woody,

1929). In the same year (1875) Wellesley's admissions and curricular requirements also began to mirror elite men's colleges where, with but few exceptions, they matched those of Amherst and Harvard (Woody, 1929).

Women came and demonstrated they were not inferior. But scarcely had the women's colleges succeeded fully in imitating the men's, when numerous criticisms were made of this policy...These critics wanted to know why such a straight-laced curriculum was so strictly followed; why education especially designed to meet the needs of women was not provided...Surely, it was said, they did not need to swallow so many lexicons, grammars or master the intricacies of differential and integral calculus in order to learn how to operate a household, bring up children, or prepare themselves for newly opening professions. (Woody, 1929, p. 210)

Perhaps one of the most entertaining concerns expressed about the purpose and context of women's education was the prevailing fear that "women might forsake their infants for quadratic equations" (Woody, 1929, p. 138). The concern that educated women would no longer prioritize their domestic place as homemaker and mother instilled fear that their education would upset two thousand years of patriarchy. We know from history that women did not feel empowered to make choices about education, motherhood, and/or both for nearly another one hundred years and the dawn of the post WWII feminist movement (Friedan, 2001; Coontz, 1992; Gilligan, 2011).

As discussed in the next two sections, the first women's colleges were targeted toward different types of female students (training programs, finishing schools, liberal arts study, etc.). Women's access to higher education has evolved over time, as have the institutions themselves. What remains fairly consistent is the tiered system of classifying women's colleges based on selectivity.

Women's Access to Higher Education

Early women's colleges varied widely in quality and purpose; they included training programs for the nation's teachers, finishing schools for affluent young women, and "prestigious, selective, rigorous places of higher learning" for women excluded from the Ivy League (Rice, 1990, p. 53). Women's colleges emerged in many forms from highly selective institutions to those with open admissions, from independent and religiously affiliated, to liberal arts focused and vocational focused programs. Many women attending women's colleges were recognized for academic achievement in the form of Phi Beta Kappa² membership, yet women's colleges were viewed as inferior to prestigious men's colleges (Langdon, 2001).

Riordan (1994) argues that women's colleges were founded as a way to create educational access for women and, therefore, were considered a temporary solution and lesser educational option. As many women's colleges evolved into serious academic institutions, coeducation remained coveted, "without serious consideration as to whether it was the more equitable option for a woman's education" (Langdon, 2001, p. 7).

While most institutions of higher education remained closed to women, a handful of schools embraced the idea of coeducation. Prior to the Civil War, only five institutions admitted women: three private colleges in Ohio—Antioch, Oberlin, and Hillsdale (now in Michigan)—and two public universities—the University of Iowa and the University of the Desert (which was later renamed the University of Utah). Oberlin College and Conservatory, a private coeducational institution founded in 1832, is recognized for having been the first to admit students of color and women beginning in 1837 (Oberlin College, 2014).

² Founded in 1776, Phi Beta Kappa Society is the nation's oldest academic honor society.

By the 1930s, coeducation became more widely accepted as public land grant institutions were founded (Cohen, 1998), though single-sex admissions continued to dominate elite institutions and the Ivy League for another fifty years. Columbia University, for example, did not admit women until 1983 (Boss-Bicak, 2009). As the country further embraced the idea of educating women and men together, women's colleges began to disappear – either by merging with historically men's colleges or by closing their doors altogether.

More than 300 women's colleges existed in 1950 with 37 remaining today (Women's College Coalition, 2017). Women's colleges began moving toward coed enrollment during times of economic difficulty and social upheaval. Societal shifts of the 1960s and 1970s resulting in women's acceptance to many coeducational institutions that had previously been closed to them suggested that access to coeducation was no longer an issue for women (Studer-Ellis, 1995). In the wake of lagging enrollment and financial difficulty, most previously existing women's colleges have either closed their doors, became coeducational, or merged with historically male institutions (Kinzie et al., 2007).

Today, less than two percent of female college graduates attended a women's college (Women's College Coalition, 2017). Thirty-seven women's colleges in the United States have persisted with missions focused on offering women students a uniquely different experience grounded in a women-centered curriculum with opportunities for leadership and intellectual advancement, as well as strong alumnae networks and substantial endowments. These remaining women's colleges are committed to the intellectual development of women that ultimately affect social and educational equality (Riordan, 1994; Langdon, 2001; Kinzie et al. 2007). (See Appendix C.)

As demonstrated in the next section, women's colleges have been categorized from the earliest days of their existence with a hierarchy that has remained relatively unchanged, sans omission of selective colleges that have become coeducational. Among those women's colleges still in operation are a significant number of the most selective liberal arts colleges in the nation, as well as those steeped in legacy with large endowments.

Women's College Selectivity

Categories of rating women's college selectivity can be found in the earliest development of the colleges themselves (Woody, 1929). As early as 1871, the Bureau of Education reported that 209 institutions classified themselves for the superior education of women, whereas "there were probably not more than a half dozen in the entire country" that could meet the later "Division A" classification as many schools reporting were merely secondary schools and not at all classified as colleges by the new standards (Woody, 1929, p. 185). In 1886, the Commissioner of the Bureau of Education called for a distinction between female seminaries and collegiate institutions whereby the latter formed "Division A" – including seven institutions: Bryn Mawr College, Vassar College, Ingham University (the first and only women's university in the United States), Wells College, Wellesley College, Smith College, and the Society for Collegiate Education of Women at Cambridge, later renamed Radcliffe College (Woody, 1929). Mount Holyoke College was added in the following year. By 1890 fifteen institutions comprised the "Division A" list – among them all of the earliest established colleges for women cited here as well as Mills College, Women's College of Baltimore, Evelyn College (at Princeton), Elmira College, Barnard College, Rutgers (later Douglas College for Women), and the

Cleveland College for Women (Woody, 1929, p. 185). The “Division A” classification was the foundation for later distinctions made by the Carnegie Classification.

Since 1973, the Carnegie Commission on Higher Education has collected data on six parallel classifications: the basic classification, undergraduate and graduate instructional program classifications, enrollment profile and undergraduate profile classifications, and size and setting classification (The Carnegie Classification of Institutions of Higher Education, 2015). This six point classification is widely accepted and often used in the study of higher education as a way to represent and control for institutional differences and to ensure adequate representation of sampled institutions, students, or faculty in the design of research studies (The Carnegie Classification of Institutions of Higher Education, 2015).

Women’s colleges are classified as More Selective (MS)³ and Selective (S), in a three-tier typology referring to top tier, second tier, and non-ranked. The selectivity ranking, as well as the transfer rate, are the factors that differentiate the More Selective (MS)/top tier and Selective (S)/second tier classification. The Classification for More Selective (MS)/top tier women’s colleges is defined by fall enrollment data showing at least 80 percent of undergraduates enrolled full-time, test score data for first-year students indicating more selective admissions criteria placing institutions in roughly the top 20 percent of all baccalaureate institutions, and fewer than 20 percent of entering undergraduates are transfer students (The Carnegie Classification of Institutions of Higher Education, 2015). As of 2015, women’s colleges meeting these criteria are: Barnard College, Bryn Mawr College, College of

³ The shift from superior, Division A, and references to highly selective in the earliest classifications of women’s colleges to More Selective to recognize the top tier is primarily in language only.

Saint Benedict, Mount Holyoke College, Saint Mary's College, Scripps College, Smith College, and Wellesley College (The Carnegie Classification of Institutions of Higher Education, 2015).

The Carnegie Classification for Selective (S)/second tier women's college is defined by fall enrollment data show at least 80 percent of undergraduates enrolled full-time, test score data for first-year students indicate selective admissions criteria placing institutions in roughly the middle 40 percent of all baccalaureate institutions, fewer than 20 percent of entering undergraduates are transfer students (The Carnegie Classification of Institutions of Higher Education, 2015). As of 2015, women's colleges meeting these criteria are: Agnes Scott College, Converse College, Hollins University, Meredith College, Simmons College, Spelman College (a HBCU), Sweet Briar College, and the College of New Rochelle (The Carnegie Classification of Institutions of Higher Education, 2015). The remaining number of women's colleges are not ranked, as they do not meet the minimum criteria for more selective or selective admissions.

Table 2. Carnegie Classifications of Women's Colleges

<i>More Selective (MS)/Top Tier</i>	<i>Selective (S)/Second Tier</i>
Barnard College (New York, NY)	Agnes Scott College (Decatur, GA)
Bryn Mawr College (Bryn Mawr, PA)	Converse College (Spartanburg, SC)
College of Saint Benedict (Collegeville, MN)	Hollins University (Roanoke, VA)
Mount Holyoke College (South Hadley, MA)	Meredith College (Raleigh, NC)
Saint Mary's College (Notre Dame, IN)	Simmons College (Boston, MA)
Scripps College (Claremont, CA)	Spelman College (a HBCU) (Atlanta, GA)
Smith College (Northampton, MA)	Sweet Briar College (Lynchburg, VA)
Wellesley College (Wellesley, MA)	College of New Rochelle (New Rochelle, NY)

Source: The Carnegie Classification of Institutions of Higher Education (2015). Custom Listings.
http://carnegieclassifications.iu.edu/lookup_listings/custom.php

Much of the existing literature about the student experience at a women's college has been focused on the top tier, more selective grouping of colleges. What remains for exploration is a better understanding of how female students attending second tier women's colleges experience the single sex environment and if their gains are similar to alumnae of the most selective women's colleges.

Social Class

Recognized in the differences in selectivity between top tier and second tier Carnegie classifications are the potential social class differences comprised of women admitted to these institutions. Joan Ostrove (2003), in her work "Belonging and Wanting: Meanings of Social Class Background for Women's Constructions of their College Experiences," asks if elite institutions of higher education are navigated differently by people from different class backgrounds and situates this work around the question "does class background influence women's experiences at elite colleges?" (p. 772). Ostrove's research specifically analyzed experience of 1960s graduates from both Smith College and Radcliffe College thirty years post-graduation to demonstrate that there are personal and professional effects of social class background that persist well into adulthood, and that class background shapes our assumptions related to belongingness and, particularly in the context of college, desires of mobility (Ostrove, 2003).

Drawing from her earlier research with Abigail Stewart (Ostrove & Stewart, 1998; Stewart & Ostrove, 1993) where they used survey data describing the class-based cultures of specific colleges to examine the role of class in the individual's college experience, Ostrove cites that "different institutions represent the characteristics of different social classes: The differences in architecture, curriculum, and interpersonal style between a community college

and an Ivy League college are visible markers of the differences between the upwardly mobile sector of the working class and the professional upper and upper-middle classes” (Ostrove, 2003, p. 772).

Despite the homogeneous context of the sample (mostly white, middle to upper class women of an approximate post-college age), this research is meaningful for its examination of the diverse meanings and implications of class. Findings suggest that working-class women, and some middle-class women, felt academically unprepared, overwhelmed or intimidated, socially isolated, and financially hard-pressed (Ostrove, 2003). Using the seven-point Hollingshead and Redlich (1958) scale of socio-economic status (SES) Ostrove cites:

Although there were virtually no social class differences among women in terms of post-college occupation or educational achievement, or in rates of marriage, divorce, or parenting, our results suggest that class background mattered for these women’s psychological experiences of college...the psychological and interpersonal implications of class were salient for them even almost 30 years after graduation. (Ostrove, 2003, pp. 773, 780)

Ostrove demonstrates the complications of class with an example from one woman who felt a sense of intellectual entitlement and belonging, as she was middle-class and attended a private day school prior to Radcliffe, but was not part of the elite boarding school upper-class club whose membership was based on more than intelligence and was closed to outsiders (Ostrove, 2003).

Alternatively, many women in the upper class could be indifferent toward class distinctions within their educational environment. One woman of high socio-economic status stated, “... social class didn’t matter ... except that I had a highly privileged high school education, which means that Radcliffe was a breeze. But I found that the general level of

intelligence meant that people caught up and Harvard is a great leveler on the way up, which is what's wonderful about it ..." (Ostrove, 2003, p. 780).

Ostrove studied the concepts of belonging and wanting to better understand in what ways class background shapes women's experiences at college. Using survey data from 193 women who attended Smith College in the 1960s, and interview data from seven women who graduated from Radcliffe College in 1964, Ostrove demonstrates that college is experienced differently based on class background and individual expectations for social mobility (Ostrove, 2003).

It is clear that the extent to which women felt comfortable or believed they belonged at Radcliffe had much to do with where they grew up, the kinds of secondary schools they attended, and the type of work their parents had. In general, themes of both social segregation and academic unpreparedness were evident among the women from working-and middle-class families, while themes of a continuation of family tradition were evident among women from upper-class families. (Ostrove, 2003, p. 783)

Providing a foundation for thinking about class, gender, and educational success are the research team of Helen Lucey, June Melody, and Valerie Walkerdine (2003) who explore the complexities of the losses as well as the gains involved in educational success and upward mobility for working-class young women. In their study *Uneasy Hybrids: Psychosocial Aspects of Becoming Educationally Successful for Working-Class Young Women*, the team addresses the concept of hybridity – "when aspirations and success mean becoming and being profoundly different from your family and peer group" (Lucey et al., 2003, p. 286).

Key to their findings are the emotional losses experienced by working-class female students associated with social mobility, even when desired, and the enormous amount of psychological work involved in the transformation (Lucey et al., 2003). According to Lucey et al.,

mixed emotions are common among working-class female students and their families who are moving from one social class to another through educational attainment. Educational success among working-class female students can “provoke as many difficult feelings in families, such as anxiety and ambivalence, as it can positive ones, such as pride, excitement and love” (Lucey et al., 2003, p. 286).

Wendy Luttrell (1994) in her work “Becoming Somebody: Aspirations, Opportunities, and Womanhood” studied how gender, race, and class shaped what women *knew* [emphasis in original] about their futures. Luttrell analyzed past and present schooling experiences to “show the effect of social differences on women’s knowledge and power...and to document the part played by social differences in people’s life trajectories and chances” (Luttrell, 1994, p. 18). Recognizing that social reproduction is complex, Luttrell focused on the idea of what it means to become somebody in the context of occupational aspirations in relation to opportunity structures i.e. what one wants or chooses in relation to the ability to achieve/acquire said wants or choices (Luttrell, 1994). For example, the practice of downscaling aspirations among female college students where peer-group interactions favor a culture of romance over academic and career pursuits, thus preparing women for subordinate roles (Luttrell, 1994).

Luttrell (1994) draws on cultural studies and narrative analysis to highlight gender, race, and class in the formation of aspirations that link what society offers to what individuals choose (pp. 18-19). As relevant to my research, Luttrell aims to discover the “similarities and differences in how women interpreted their lives and projected their futures, rather than generalize” (1994, p. 19). Luttrell’s work provides a framework for thinking about the process of social reproduction within the context of women’s experiences and their aspirations.

In her findings, Luttrell demonstrates that social reproduction looks different from the ground up than from the top down. Specifically, that what society offers (opportunity structures) and what individuals want (aspirations) is incredibly nuanced (Luttrell, 1994). Luttrell's participants' stories about what it means to *be somebody* [emphasis in original] help us understand the potential for social mobility in the form of making choices and planning strategies about the future (1994, p. 34).

Based on research by Ostrove (2003), Luttrell (1994), and Lucey et al. (2003), it is clear that class background is an important factor related to how women experience college, as well as the lasting implications of those experiences into adulthood. Understanding how college is experienced by women attending second tier women's colleges as compared to those attending top tier institutions remains an important area for future study.

Why Women's Colleges Still Matter

Women's colleges remain relevant as a means of combating gendered norms and expectations constraining selection of field of study and occupation that perpetuate tangible inequities related to lower wages, underemployment, and segregated occupations (Nelson & Rogers, 2004). Seminal studies from M. Elizabeth Tidball (1973) and Alexander Astin (1977), as well as follow-up research by Daryl Smith (1990), Ernest Pascarella, Elizabeth J. Whitt, Marcia I. Edison, Amaury Nora, Linda Serra Hagedorn, Patricia Yeager, and Patrick T. Terezini (1997), and Jillian Kinzie, Auden Thomas, Megan Palmer, Paul Umbach, and George Kuh (2007) demonstrate the continuing need for women's single-sex education.

Tidball (1973) is recognized as the preeminent scholar of women's college graduates as her research has had a lasting impact on the debate about academic and professional

opportunities for women. Recognizing that the *Who's Who* database is only representative of women who chose to register, Tidball examined listings of *Who's Who of American Women* and found that women's college graduates were more likely to be listed for their professional accomplishments than their female coeducation counterparts (Tidball, 1973). Tidball measured accomplishment based on *Who's Who of American Women* publication entry, then tracked by undergraduate institution, and found that women's college graduates were nearly twice as likely to be cited than female graduates of coeducational schools (Tidball, 1973).

Tidball found that this pattern of accomplishment was relevant regardless of institutional selectivity. Tidball separated women's colleges and coeducational colleges into four groups: highly selective women's colleges (defined as the Seven Sisters), ten highly selective coeducational colleges, fifty-two other women's colleges, and 279 other coeducational colleges to support her findings that when women's and coeducational colleges of similar selectivity are compared, women's colleges produced more achievers at both levels of institutional selectivity (Tidball, 1980, p. 512).

However, critics argued that Tidball's method did not sufficiently control for institutional selectivity or socio-economic class (Oates & Williamson, 1978; Crosby et al., 1994). Martha Oates and Susan Williamson (1978) controlled for selectivity in their study by using the *Who's Who in America* listings, as opposed to the female-only *Who's Who of American Women*, and by omitting graduates of the Seven Sisters colleges from the data pool as they determined that the disproportionate higher achievement rates of women's college graduates, over their female coeducational counterparts, was skewed by the high percentage of Seven Sister's achievers (3.4 times that of all other similarly sized women's and coeducational colleges) as opposed to

Tidball's claims related to the merits of a single-sex environment (p. 800). Oates and Williamson argued that the difference separates the women's colleges into two tiers and justified the consideration of three types of institutions of higher learning: the Seven Sisters, the non-Seven Sisters, and coeducational colleges of similar size, as opposed to only women's colleges and coeducational colleges (p. 799). "Differences between the two types of women's colleges provide the basis for a detailed study of women's colleges" (Oates & Williamson, 1978, p. 805).

Tidball responded by arguing that the methodology in comparison was flawed and that "if the authors had used groupings of institutions which were truly comparable for comparison, the contributions of non-Seven Sisters women's colleges would have emerged more clearly" (Tidball, 1980, p. 512). The tension continued as Oats and Williamson asserted that further examination of the socioeconomic backgrounds of students by institutional type could "add significantly to what is known about the career consequences of higher education for women" (1978, p. 805). As both pieces of research are dated and disagreement about what is known persists, it is important to further explore questions related to selectivity versus environment.

While acknowledging that a lot has changed for women in today's higher education landscape, where they are now the majority in college (Kinzie et al., 2007), there remain spaces that are "chilly" for them, most notably in STEM fields. As discussed in the following sections are the efforts and claims made by women's colleges to address issues related to college impact, cognitive development, and a women's-centered curriculum.

College Impact: Women's Colleges and Coeducational Institutions

As a result of the move toward coeducation, Roberta Hall and Bernice Sandler (1982) reported on the "chilly campus climate" (p. 5) pertaining to how women are perceived and

treated on coed campuses. Though dated, this work remains relevant as it presented important findings related to inequitable patterns in faculty representation, curriculum content and design, and meaningful student-teacher interaction for women students attending coeducational institutions that jeopardize their personal, academic, and professional development. Chilly classroom climate is defined as perpetuating stereotypical views of women, as well as more subtle behaviors such as speaking exclusively in male terms and giving less support and guidance to women students overall (Hall & Sandler, 1982). Ernest Pascarella et al. (1997) further identified negative relationships between the perception of chilly campus climate and lower gains in writing and thinking skills and science, arts, and humanities knowledge for women.

Alexander Astin (1977) and Daryl Smith (1990) both conducted college impact studies of students' intellectual development, with comparisons between students attending a broad sample of women's colleges (selective, religious, etc.) and those at coeducational institutions. Astin created a framework for research using multi-institutional data to compare traditionally college age people (18-22) across contrasting types of institutions and those who did not attend college, and also longitudinal data to examine change across time in college (Astin, 1977). Furthermore, Astin addressed other features that had been missing from earlier college impact research by including large and diverse samples of students and institutions, as well as collecting multiple measures of entering student characteristics and multiple follow-up measures of cognitive development. Astin (1977) also used multivariate designs to control for student difference entering different types of institutions and made provisions to separate college effects from the simple process of growing up (p. 3). As a final measure, Astin examined

how the college experience affects attitudes, values, behavior, achievement, career development, and satisfaction (Astin, 1977).

The culmination of Astin's earliest research was presented in his book *Four Critical Years* (1977). Astin found that women's single-sex colleges were stronger than coeducational institutions in the area of academic development and that students at single sex colleges were more satisfied than students at coed colleges, persisted more in their studies, and were more likely to attend graduate school (Astin, 1977). Astin's early longitudinal data collection culminated in the establishment of the Cooperative Institutional Research Program (CIRP), housed at the Higher Education Research Institute at the University of California, Los Angeles, where Astin served as the founding director and has led the ongoing national study of college impact and researched the American higher education system for more than forty years (Higher Education Research Institute, 2014).

Daryl Smith's 1990 research findings are similar to Astin's foundational research indicating that academic development is stronger for students at women's colleges, despite the fact that the times and circumstances for women's colleges had changed significantly between studies (Smith, 1990). Acknowledging that few studies directly comparing the two types of collegiate experience (women's single-sex and coeducation) had been conducted, the purpose of Smith's study was to compare experiences of students who had attended women's colleges with those who had attended coeducational institutions (Smith, 1990). Astin's study controlled for institutional selectivity, but did not segment women's colleges by selectivity in the analysis. Smith did not control for selectivity.

According to Smith, the classic model of college impact studies relied on a limited variable linear approach that did not reflect the complexity in the dynamics of college impact (Smith, 1990, p. 183). The classic model proposed that the outcomes of college are a function of (1) the entering characteristics of the students, (2) the kind of institution attended, and (3) the experience of the student while in college (Smith, 1990, p. 183). Smith's research focused on the ways that attending a women's college or coeducation college related to measures of satisfaction, persistence toward degree attainment, and educational aspirations such as graduate school (Smith, 1990, p. 184).

Using longitudinal data from CIRP to study student outcomes over four years, Smith compared the experiences of women who attended women's colleges to women students who attended coeducational institutions (Smith, 1990). Using hierarchical regression (multiple regression with additional predictor variables), Smith analyzed twenty-three pre-determined measures of student satisfaction (Smith, 1990, p. 187). Findings were consistent with Astin's in measures of student satisfaction, perceived skill development, and educational aspiration. Furthermore, students attending women's college were more likely to complete their academic program than female peers at coeducational institutions, 65% compared to 50% (Smith, 1990, p. 192).

Jillian Kinzie et al. (2007) analyzed data from the National Survey of Student Engagement (NSSE) using a random sample of female first-year and senior students from 26 women's colleges and 264 other four-year institutions to compare the experiences of women attending women's colleges with those of women attending coeducational institutions. Kinzie et al.'s (2007) findings suggest that women at single-sex institutions are more engaged and

reported higher levels of feelings of support and greater gains in college than their counterparts at coeducational institutions of equal selectivity and prestige. NSSE data was used specifically to determine the ways that women's colleges differ from comparable coeducational institutions in terms of student satisfaction with their experiences, interaction with peers and faculty members, educational gains, and participation in activities associated with desired college outcomes (Kinzie et al., 2007, p. 148).

Kinzie et al. (2007) analyzed data with models examining engagement (as defined by the four measures above) of first-year and senior women at coeducational and women's colleges. First-year and senior student data were analyzed separately because students' experiences related to those activities measured by NSSE (as aligned to the engagement measures above) show differences in engagement levels between the two groups (Kinzie et al., 2007, p. 149). Hierarchical linear modeling (HLM) was used to address problems with nested data and to estimate institutional effects (Kinzie et al., 2007, p. 150). Underlying the analysis was the assumption that institutions have a differential impact on the student experience i.e. students were nested within institutions and observations are not independent from one another (Kinzie et al., 2007, p. 150). Using data collected by NSSE, Kinzie's team suggests that women who attend a woman's college are "advantaged in terms of the nature and frequency with which they engage in educationally purposeful activities and in the progress they make in a variety of desirable outcomes of college" (Kinzie et al., 2007, p. 159).

The research, overall, supports single-sex education for women; however, an opening is also left to further differentiate between institutional selectivity to better understand if female students attending less selective women's colleges experience the single-sex environment in

the same way as alumnae of the most selective women's colleges. To further explore positioning of single-sex schooling for women, cognitive development and the importance of a women's-centered curriculum are considered in the following sections.

Cognitive Development

It is important to question and analyze how cognitive ability is measured in order to better understand the intellectual and cognitive development among women attending women's colleges. Benjamin Bloom's (1956) original work on the taxonomy of learning domains provides a framework for understanding cognitive learning. Cognitive learning is defined as the intellectual skills and knowledge developed by recall, using knowledge, comprehension, applying meaning, distinguishing facts for analysis, and evaluative decision-making. Also to be considered are the qualitative benefits related to self-confidence, engagement, career satisfaction, leadership development, and success after graduation (Bloom, 1956).

Understanding Bloom's classification is important to analyzing research that differentiates learning outcomes and achievement, including among women attending women's colleges and those female students enrolled at coeducational institutions. The majority of impact and comparative research supports initial claims by Astin (1977) and Tidball (1973) suggesting that women's colleges excel at female faculty representation, women's-centered curriculum and programming, meaningful student-teacher interaction, and intellectual engagement – key factors of intellectual and cognitive development (Pascarella et al., 1997; Kinzie et al., 2007).

A key theme emerging from the literature related to cognitive learning among women attending women's colleges that most researchers can agree upon is that women's colleges offer a qualitatively different educational environment from the coeducational experience and

provide a space to facilitate the intellectual self-confidence required to develop and test the cognitive skills necessary for academic advancement (Astin, 1977; Riordan, 1994; Langdon, 2001; Kim, 2002; Kinzie et al., 2007). Four thousand six hundred seventy six (4,476) randomly selected first-year and senior women at 294 institutions (26 women's colleges) were surveyed in years 2000, 2001, and 2002. Findings support claims that students enrolled in women's colleges rise to higher levels of academic challenge, that seniors at women's colleges are more likely to engage in cognitive development activities than seniors at coeducational institutions, and show greater gains in the ability to analyze quantitative problems (Kinzie et al., 2007; NSSE, 2011).

Mikyong Minsun Kim (2002) offers alternative findings suggesting that there is no significant difference in cognitive ability among students attending women's colleges and those enrolled at coeducational institutions. However, Kim's findings do suggest that women's colleges have a "significantly greater positive impact on development of intellectual self-confidence" (Kim, 2002, p. 447). Kim says that most studies of women's colleges have focused on post-college career success as measured by the proportion of achievers listed in *Who's Who of American Women*, *Who's Who in America*, *Who's Who Among Black Americans*, and *Who's Who Among Hispanic Americans* and have retrospectively inferred intellectual gains during college (Kim, 2002). Kim's study uses data sets provided by CIRP to examine the capacity of 4-year women's-only and private 4-year coeducational colleges to cultivate women students' intellectual development. Using the measures of critical thinking ability and analytical and problem-solving skills as outcomes, Kim evaluates student growth in higher order thinking skills to better understand how attending a women's only college may relate to female students'

intellectual development (Kim, 2002, p. 448). Findings further indicate that students attending women's colleges are more likely than female students in coeducational settings to participate in activities that are intellectually stimulating, such as leadership development, diversity training, and campus work (Kim, 2002).

Women's Centered Curriculum

In their influential work, *Women's Ways of Knowing*, the research collaborative of Mary Field Belenky, Blythe McVicker Clinchy, Nancy Rule Goldberger, and Jill Mattuck Tarule (1997) propose a new approach for how to design an education appropriate for women by considering what women know. Belenky et al. (1997) state that traditional courses are dominated by questions from the mainstream culture.

If the student is female, her questions may differ from the culture's questions, since women, paddling in the bywaters of the culture, have had little to do with posing the questions or designing the agendas of the disciplines. Indeed, as writer Mary Jacobus (1979) points out, although nineteenth and twentieth century feminists have sought access to education as a means of liberation, this access to a male dominated culture may equally be felt to bring with it alienation, repression, division, a silencing of the feminine, a loss of women's inheritance. (Belenky et al., 1997, p. 198)

As we know from previous sections of this paper, women's colleges were initially founded to create access to education for women who were otherwise left out of higher education (Tidball, 1973; Astin, 1977; Rice, 1990; Langdon, 2001). Belenky et al. (1997), Hongyu Wang (2008), and Rebecca Martusewicz, Jeff Edmunson, and John Lupinacci (2011) each provide a deeper understanding of the purpose of schooling for women by drawing on and recounting the roles of women and mothers as the first teachers, thus promoting women's ways of knowing as an effective means toward educating women. An important element of women's centered curriculum requires questioning patriarchal discourses that grant strength to

the masculine and weakness to the feminine (Wang, 2008) and exploring root metaphors that have “functioned historically to rationalize strong patriarchal relations throughout our society that define men and women’s natural place in society” (Martusewicz et al., 2011, p. 91).

Belenky et al. (1997) further address paradigms related to male dominance in higher education curriculum design when they state, “most of the institutions of higher education in this country were designed by men, and most continue to be run by men” (p. 190). This work of feminist theory draws from 135 first-hand interviews of women of various ages from a variety of cultural and socio-economic backgrounds to create recommendations for ways to improve the problem of higher education's teaching methods as more responsive to male gender norms than female gender norms. It is through this work that we understand the epistemology of the development of women's knowledge that can be used to better interpret educational design and intellectual development needs at the college level where treating everyone the same is not, or should not be, the goal.

Nel Noddings (2007) makes a valuable point as part of her discussion about equality that can be applied to a discussion about gender when she states, “today equal opportunity is often equated with equal results” (p. 28). Noddings questions the pervasive nature in treating all students the same despite the fundamental importance in recognizing that they are not equal. Because students are different, “their educations, then, should differ. Plato, Rousseau, and Dewey all agreed on this. Indeed, we might argue that there is nothing so *unequal* in education as sameness” (Noddings, 2007, p. 29, emphasis in the original). Noddings argues that schooling in a democratic society should provide for difference, whether ethnic, socio-economic, or gendered; and that the curriculum should be unique to the talents and needs of the student

population (Noddings, 2007, p. 31). Noddings cites Claude Steele's "stereotype threat" to demonstrate the impact of gendered norms:

If students [who] are told that people like them do not do well on certain tests or tasks, the chances increase that, in fact, they will not do well. Often told that women lag behind men in mathematics – that women are just “not up to it” – most women do indeed lag behind men. (Noddings, 2007, p. 35)

One need only look to STEM fields to demonstrate the realities of stereotype threat on the everyday lives of women. For example, the U.S. Department of Commerce's Economics and Statistics Administration (ESA) reports that women in STEM fields earn 33% more than comparable women in non-STEM jobs; 30% of men in STEM earn 30% more than women in STEM, whereas, the current normative pay gap between professional men and women is 77% thus the gender wage gap is smaller in STEM than among working women in general (Beede et al., 2011). Although women fill almost half of all jobs in the U.S. economy, women hold less than 25% of STEM jobs, and women holding STEM degrees are less likely to work in the field and more likely to work in education or healthcare where the gender wage gap is larger (Beede et al., 2011). As noted by the ESA report “possible factors contributing to the discrepancy of women to men in STEM fields include: lack of female role models, gender stereotyping, and less family-friendly flexibility in STEM fields” (Beede et al., 2011, p. 1). According to Kinzie et al. (2007) women attending women's colleges are one and a half times more likely to earn degrees in science and math than their counterparts at coeducational colleges, as well as demonstrate greater gains in cognitive skills such as academic and intellectual development, academic involvement, intellectual self-confidence, and self-perceived academic ability (p. 146).

With the exception of Kim's study disputing the cognitive gain difference between women graduates of women's colleges and female students from coeducational institutions, research overwhelmingly supports the claim that women gain intellectually and cognitively in women's only academic settings. As cited earlier, many women's colleges became coeducational in the wake of financial strain and the belief that coeducation was better while disregarding evidence that women who attended women's colleges were more satisfied with their experience, persisted more in their studies, and were more likely to attend graduate school (Smith, 1990). Nearly forty years later, the same can be said in relation to the push for women to enter traditionally male-dominated STEM fields. Is STEM better for women intellectually, cognitively, and personally, or do those fields just pay more? Is better pay the ticket to gender equality?

Salient to why women's colleges still matter are issues related to the takeaways of college as defined by impact, cognitive development, and a curriculum facilitated to support women's learning. The following section discusses gender in the context of women's college experiences at single-sex institutions.

Gender in Education

Jerry Jacobs (1996) describes how gender inequality is more pronounced in some aspects of the higher educational system than in others. His analysis focused on issues central to the question of gender equality; defined as equal representation, treatment, and value of women and men as related to access to higher education, college experiences, and post-collegiate outcomes. Jacobs suggests that access, experience, and outcomes are distinct aspects of higher education that do not necessarily coincide with one another and should be examined

separately (Jacobs, 1996). According to Jacobs, women fare relatively well in the area of access, less so in terms of the college experience, and are particularly disadvantaged with respect to the outcomes of schooling (1996).

The college experience differs by gender in many ways. Of particular interest to Jacobs are fields of study, women's studies, faculty, harassment, and women's colleges (Jacobs, 1996). Jacobs stressed that "if college provided an undifferentiated education conferred equally on young men and women, then the issue of access would settle the question of gender inequality but, in fact women and men experience college differently and face markedly different outcomes" (Jacobs, 1996, p. 167). Jacobs' analysis positions the idea that gender inequality in the United States is a matter of "gender differentiation in educational experience and outcomes" (Jacobs, 1996, p. 177).

The evolution of women's studies programs has impacted the mainstreaming of gender issues in the humanities and social sciences where men represent the majority of college and university faculty (Jacobs, 1996). As stated earlier in this review, male dominance among the faculty is mitigated to some extent in the women's college environment, both historically and in the present, where female faculty outnumber male faculty (Tidball, 1973; Rothstein, 1995). Jacobs examines the reasons behind gender inequity among the faculty, citing women's concentration in a limited number of fields, hiring and promotion practices, and job satisfaction and turnover. Jacobs summarizes:

Women have been disadvantaged to some extent in every stage of the academic career process...and that the extreme exclusion of women from Ivy League institutions undermined the position of all women faculty, because, with the emergence of the research university as the pinnacle of the higher education system, these schools came to set the pattern for higher education as a whole. (Jacobs, 1996, p. 172)

Furthermore, the advancement of female faculty was not made easier as “by the 1920s women college students, most of whom planned marriage and not career, did not entirely identify with their female faculty mentors, who had sacrificed so much for the sake of women’s education. The faculty was often perplexed and disappointed by the students who followed them” (Jacobs, 1996, p. 172).

Harassment is another factor related to college experience that impacts gender equality in higher education. Faculty harassment is especially consequential for graduate students who rely heavily on their advisors. Such harassment can be especially hostile for women as one aspect of the larger question related to gender equality in higher education (Jacobs, 1996).

Post-collegiate outcomes cited by Jacobs include differences in earnings despite educational parity attained by women, supported by 1991 U.S. Bureau of the Census data demonstrating that women earn less than men even with the same level of education (Jacobs, 1996, p. 175). In connection to the college experience, Jacobs shows that “a significant portion of the gender gap in earnings can be attributed to gender differences in major” (Jacobs, 1996, p. 175). Because majors play a significant role in early career earnings, women in some fields are earning significantly less than men from the onset of their careers and are never in the position to catch up over the lifetime of their professional careers (Jacobs, 1996). Gender differences in skills developed on-the-job also contributed to the earning gap between women and men (Jacobs, 1996).

Jacobs (1996) further distinguishes among post-collegiate outcomes in that higher levels of education result in greater support for egalitarian gender roles, that education increases women’s support for feminism, and that highly educated women wield more political power,

such as that demonstrated among early suffragists, and first and second wave feminists (p. 176).

Feminist activism is responsible for much of the expansion in opportunities for women, from the founding of elite women's schools to the ongoing organizing activity of the American Association of University Women (AAUW), to Betty Friedan's (1963) influential critique of the narrow options available to college-educated women. Women's access to higher education did not emerge because of the dictates of the captains of industry, but because women successfully demanded a place. (Jacobs, 1996, p. 160)

As stated earlier, the higher education landscape has changed significantly for women over the past two decades; however, arguments against single-sex schooling for women can still be contested as women remain disadvantaged in many aspects of the higher educational system.

Conclusion

Through the analysis of literature related to women's experiences in single-sex academic environments we have gained a better understanding of women's single-sex educational environments, how women's colleges position women in society post-graduation, the impact of institutional selectivity and socio-economic class, and the broader issues associated with the history of educating women. The literature suggests that women's colleges offer a qualitatively different educational environment from the coeducational experience and provide a space to facilitate the intellectual self-confidence required to develop and test the skills necessary for academic advancement. Existing research has predominantly focused on the benefits of single-sex college environments for Seven Sisters graduates, thus creating a gap to explore the experiences of graduates of selective women's colleges (i.e. second tier).

In this review I have also provided a background for understanding the history and politics of higher education for women and why women's college still matter in the current

higher education landscape. As stated in the introduction, the most selective women's colleges have long been viewed as elite spaces reserved for the wealthy and affluent. Selective women's colleges are less prestigious by their second tier definition and sometimes inaccurately presumed to comprise less prepared students. Gaining a better understanding of similarities and differences of experience among top tier and second tier colleges will expand our knowledge about the continued role and impact of women's colleges.

Women's colleges emerged from the female seminary movement of the 19th century and were founded to create access for women who were excluded from the American higher education system. Education equal to that provided for men was the objective, as advocates believed that future society would be inherently reliant on the assistance of enlightened women (Woody, 1929). Women's access to higher education has evolved over time, as have the institutions themselves; however, the tiered system of classifying women's colleges based on selectivity has remained consistent.

The literature supports that field of study, graduate school admission, pay equity, and upward mobility are all impacted by college experience and outcomes, thus having a direct effect on gender equality and the positioning of women in society post-graduation. As cited earlier, Jacobs (1996) credited suffragists and feminist activism for much of the expansion of opportunities for women; however, the work will not be complete until such benefits and outcomes are held by all women, regardless of class. Furthermore, Jacobs (1996) makes a very important distinction in stating:

There are also fundamental problems with extending the logic of class reproduction to the case of gender inequality. The analogy between class and gender fails because these two forms of inequality bear a fundamentally different relationship to the education system... As we have seen, in the United States women have attained access to higher

education more or less on par with their male counterparts. Gender inequality in earnings persists despite rough equality in access to education, whereas class inequality is based on sharp differences in access to education. (p. 160)

While acknowledging that a lot has changed for women in today's higher education landscape, negative relationships still persist between coeducational environments and lower gains in writing and thinking skills and science, arts, and humanities knowledge for women (Pascarella et al., 1997). Noddings' (2007) study of education as sameness across ethnic, socio-economic, and gender dimensions demonstrates that equal opportunity should not be equated with equal outcomes. Issues related to an institutionalized perpetuation of low expectations (i.e. stereotype threat) contribute to lower intellectual development gains for women in coeducational settings. As a matter of educational equality, women's access to power and opportunities to learn can be facilitated in an educational community dedicated to women's advancement such as those provided by women's colleges.

Important limitations of the existing literature include the self-selection nature of women's college matriculation, despite knowing that women who have attended women's colleges are not very different in background from women attending all institutions (Smith, 1990); institutional differences contributing to the creation of different environments; the fact that the majority of women's colleges are four-year liberal arts schools (Kim, 2002); and the self-reporting nature of the data collected by CAE, NSSE, and other student impact centers (Arum & Roksa, 2011; Kim, 2002). These limitations influence what we know about women's experiences at single-sex colleges, but do not inform us of experiential differentiation among those attending institutions beyond the top tier.

In conclusion, it is understood through the literature that the value of women's colleges continues to be debated; however, it has been established that differences in educational environment do lead to differences in intellectual development among women that ultimately affect educational equality (Riordan, 1994; Langdon, 2001; Kinzie, 2007). A key implication of the research reviewed is that U.S. coeducational postsecondary institutions do not provide equal education for women (Jacobs, 1996; Langdon, 2001) and, until they do, colleges for women remain relevant for female students who can benefit from the single-sex environment. Women's colleges remain important to women's intellectual development as they are uniquely positioned as gender conscious communities dedicated to providing faculty representation in the form of female role models, inquiry-based curriculum content and design, and meaningful student-teacher interaction.

CHAPTER 3: RESEARCH APPROACH

As stated in chapter one, this research was designed to address questions about women's experiences of single-sex educational environments, how women's colleges position women in society post-graduation, and how women's experiences at second tier institutions are similar or different to those attending the top tier. Specifically, I was interested in the experiences of women graduates of *selective*⁴ women's colleges, e.g., those in the second tier of a three-tier system. As the literature review situates my research in pertinent bodies of scholarship, this research approach provided the framework for how I collected and analyzed data necessary to answer the research question.

Research Question

As stated in chapter one, the research question is reiterated here:

How do female students attending second tier women's colleges experience the single-sex environment?

Conceptual Framework

As discussed in chapter one, I used a conceptual framework of *Belonging and Becoming* as a way to explore women's educational experiences in a stratified women's college environment. Through combined concepts developed by Joan M. Ostrove (2003), Ostrove and Abigail Stewart (1998), and Wendy Luttrell (1994), I aimed to understand how class background influences women's experiences at selective women's colleges (*belonging*) and to uncover the similarities and differences in how participants interpret their lives and project their futures

⁴ As defined by the Carnegie Classification of Institutions of Higher Education (The Carnegie Classification of Institutions of Higher Education, 2015)

based on their choice to attend a selective women's college and their experiences there (*becoming somebody*). I was also interested in understanding participants' meaning making in relation to any feelings of academic and cultural unpreparedness, social segregation, a sense of being overwhelmed or intimidated by the environment, feeling isolated, or financially hard-pressed (Luttrell, 1994; Ostrove, 2003), as well as their aspirations and goals for social mobility.

Drawing from Ostrove's research (2003) about a sense of *belonging* as related to social class background and women's experiences in top tier single-sex college environments, this element of the framework was used to understand how class background influences women's experiences at second tier women's colleges. By incorporating into the framework Wendy Luttrell's (1994) concept of *becoming somebody* based on her aspirational-centered study titled "Becoming Somebody: Aspirations, Opportunities, and Womanhood" about how gender, race, and class shaped what her participants inherently *knew* about their futures [emphasis in original], I was able to uncover in the findings the similarities and differences in how my participants interpreted their lives and projected their futures based on their choice to attend a second tier women's college.

The diverse meanings and implications of class link these research concepts where separate findings by both Ostrove and Luttrell identify feelings of academic and cultural unpreparedness, social segregation, a sense of being overwhelmed or intimidated by the environment, feeling isolated, and financially hard-pressed (Luttrell, 1994; Ostrove, 2003). Ostrove and Luttrell theorize particular ways of understanding experience. Ostrove theorizes that class plays a large role in constructing the markers that define belongingness on elite college campuses, thus opening the door to ask similar questions about the role of class at

second tier colleges. Recognizing that the process of social reproduction is complex, Luttrell demonstrates that women's aspirational stories teach us that social reproduction looks quite different from the ground up. Luttrell offers fresh insights into the process and realities of social reproduction by showing us what it is *to be somebody* [emphasis in original] (1994, p. 34).

Viewed through the lens of *becoming somebody*, aspirations and goals for social mobility can be identified. Ostrove (2003) applied the lens of *belongingness* to a very particular group of Caucasian women who had attended elite colleges in the 1960s with hopes that the theme would have broader applicability for talking about social class both inside and outside the college classroom in order to promote dialogue and social change.

Methodology

This research used a constructivist grounded theory approach to study experience of women's college alumnae of second tier single-sex academic environments. A grounded theory method was the best choice for this study as it enabled me to understand what the research participants' lives are like and how they explain and make meaning of their experiences so that we could learn about them and their world (Charmaz, 2014). The constructivist approach to grounded theory calls for an emphasis "on the feelings, assumptions, and meaning making" of participants and avoids predetermined categories (Charmaz, 2002, p. 102). Grounded theory methods, as defined by Kathy Charmaz (2014), "consist of systematic yet flexible guidelines for collecting and analyzing qualitative data to construct theories from the data themselves" (p. 1). Constructivist grounded theory adopts the "inductive, comparative, emergent, and open-ended approach of Glaser and Strauss's (1967) original statement... highlighting the flexibility of the

method and resisting the mechanical applications of it” (Charmaz, 2014, pp. 12-13) as it is important to view the research as constructed rather than discovered.

Grounded theory begins inductively and uses constant comparative methods, going back and forth between data and analysis, to keep researchers involved in the data and emerging analysis (Charmaz, 2014). Early analytical work expedites progress toward theoretical development and allows the researcher to see data in fresh ways (Charmaz, 2014). According to Charmaz, “by adopting grounded theory methods you can direct, manage, and streamline your data collection and, moreover, construct an original analysis of your data” (Charmaz, 2014, p. 3). Grounded theorists study events and experiences in order to pursue hunches and potential analytic ideas about them (Charmaz, 2014, p. 3).

Originally, grounded theory emerged from the collaboration of sociologists Barney G. Glaser and Anselm L. Strauss (1967) and resulted in their publication of *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Glaser and Strauss developed systematic methodological strategies for qualitative research and “advocated developing theories from research grounded in qualitative data rather than deducing testable hypotheses from existing theories” (Charmaz, 2014, p. 6). They intended to construct abstract theoretical explanations of social processes; they defined the components of grounded theory as follows:

- Simultaneous involvement in data collection and analysis
- Constructing analytic codes and categories from data, not from preconceived logically deduced hypotheses
- Using the constant comparison method, which involves making comparisons during each stage of analysis

- Advancing theory development during each stage of data collection and analysis
- Memo-writing to elaborate categories, specify their properties, define relationships between categories, and identify gaps
- Sampling aimed toward theory construction (theoretical sampling), not for population representativeness
- Conducting the literature review after developing an independent analysis (Charmaz, 2014, pp. 7-8, citing Glaser & Strauss, 1967).

Consistent with this reasoning, a completed grounded theory meets the following criteria: a close fit with the data, usefulness, conceptual density, durability over time, modifiability, and explanatory power (Charmaz, 2014; Glaser & Strauss, 1967). Despite disagreements in the 1990's related to emergent theoretical categories and the comparative methods used in earlier grounded theory strategies between Glaser, Strauss, and Strauss' new co-author Juliet M. Corbin (Corbin & Strauss, 1990), the flexibility and legitimacy of grounded theory methods continue to appeal to qualitative researchers (Charmaz, 2014).

To adequately develop new findings in contrast to existing research about previous generations of graduates from highly selective women's colleges, the sample for this study included graduates of selective women's colleges who had completed their degrees between 2005-2015. The steps taken to appropriately conduct a grounded theory are described in detail in the following sections. This study was approved by my university's IRB (see Appendix B).

Methods

Sample Selection

In this approach to grounded theory research, I relied on interviews about the experience (Schram, 2006, p. 101) of graduates of Carnegie Classified selective/second tier women's colleges from their own perspective. This categorical selection of selective/second tier women's colleges was chosen for its already established and commonly accepted classification of women's colleges where designation criteria is based on full-time enrollment and transfer student percentages, as well as test score data indicating second tier admissions. As discussed in the literature review, most of the research about women's colleges has been on the elite grouping of colleges embodied in the Seven Sisters (and classified as more selective/top tier), therefore, this research focused on the second-tier grouping of women's colleges (second tier) as categorized in Table 2 in chapter two. The primary difference between top tier and second tier women's colleges is reflective of first-year students' entrance exam (ACT/SAT) test scores placing the institution in either the top fifth of all baccalaureate institutions (for the top tier institutions) or the middle two-fifths of all baccalaureate institutions (for second tier institutions). In addition, Fall enrollment data for both classifications show at least 80 percent of undergraduates are enrolled full-time and fewer than 20 percent of entering undergraduates are transfer students at these bachelor's degree granting institutions.

A purposeful sampling method was used to select participants from selective women's colleges who could provide rich information about the topic (Bloomberg and Volpe, 2012). Consistent with grounded theory research, the sample size began in my study with a small sample and increased as necessary. I began with five participants and increased to eight participants, as data saturation was reached and additional analysis no longer contributed

anything new toward answering the research questions (Creswell, 2009; Ostrove, 2003). I interviewed eight participants from the second tier group who graduated within the last ten-years (2005 – 2015). The purpose of this time limit was related to participants experiences within a particular cultural timeframe as the millennial generation (economy, politics, technology, pop culture, cost of higher education, competitive admissions, etc.), as well as the natural progression of perspective over time that women within this generation may provide.

Recruitment of Participants

In my professional position as a higher education administrator, I have developed relationships with colleagues who lead me to potential participants fitting the selection criteria and used my network to distribute recruiting materials. Several peers attended a second tier women's college and were able to introduce me to alumnae meeting my search criteria. Also among my network were educators who have worked with high school students who later attended second tier women's colleges and were able to distribute my invitation flyer to those women. I initiated the process by contacting via email those colleagues and peers who may have had access to participants asking them to distribute my flyer. In response to the flyer, potential participants contacted me directly to schedule a phone call to discuss fit based on selection criteria.

Once selection criteria of attending a selective women's college between 2005 and 2015 was met and invited participants had agreed to participate, I scheduled a phone call to explain the study again, seek verbal informed consent, and schedule the first interview. During the process of scheduling interviews participants were informed that the interviews would be digitally recorded; that individuals would not be identified by personal identifying information

and that pseudonyms would be used in transcription and write-up; and that data would be destroyed three years after study publication. The Consent Form was reviewed and signed in advance of the first scheduled interview.

Data Collection

Due to the geographic location of all eight participants, interviews were conducted either by Skype or telephone. Using Skype or telephone allowed me to include participants from any geographic location within the U.S., as long distance travel was not feasible for me.

An interview guide comprised of three sections (Seidman, 2013) was planned in order to provide in-depth information related to participants' experiences in a single-sex women's college environment (see Appendix A). Each individual segment lasted thirty to forty-five minutes. Member checking, as described below in the Quality section, was done after interviews were transcribed and analysis was underway. Member checking took place in a short thirty-minute or less interview by telephone.

Per Seidman (2013), the first set of interview questions were designed to establish the context of the participants' experience; the second allowed participants to reconstruct the details of their experience; and the third encouraged participants to reflect on the meaning their experience holds for them (p. 21). The task in the first set of interview questions was for me to put the participants' experience in context by asking as much as possible about the topic. Seidman (2013) refers to this set of interview questions as the Focused Life History (p. 21).

The purpose of the second set of interview questions was to reconstruct the details of participants' lived experience in the topic area of the study. Seidman refers to this set of interview questions as The Details of Experience and suggests asking for stories about

experience as a way of eliciting details (pp. 21-22). The purpose of the third set of interview questions was for participants to reflect on the meaning of their experience within the context of the two previous grouping of questions. Seidman (2013) refers to the third set of interview questions as Reflection on the Meaning (p. 22).

Mapped by the three-part interview guide and influenced by the grounded theory approach where each subsequent set of interview questions is shaped, in part, by answers to earlier questions, interview questions were designed and revised as appropriate, to collect personal information about the participants' viewpoints and experience in a single-sex women's college undergraduate environment. Topics covered in the interviews, and described in the interview guide, included personal background information related to where she grew up, the educational level and occupation of her parents, her K-12 academic background and experience (e.g. public or private), and what contributed to her decision to attend her alma mater, etc. Additional topics covered in the interview were related to the participant's experience over time at her alma mater, the classroom environment, social situations and socializing, opportunities for leadership and to explore subjects in traditionally male dominated fields. Finally, a series of questions about the participants' post-graduation life were posed – leadership and advancement, professional networks, family life, and occupation, compensation, and social status.

Four participants said that they could reserve as much time as needed to cover all of the interview questions in one approximately two hour interview, but could not provide time for interviews spanning multiple sessions; therefore, these participants were interviewed in one longer session than the others. Of the participants who expressed time constraints, three did

not respond to attempts to schedule member checking. I don't feel that this compromised this study, as I didn't have major questions for them. If they had been available I would have shared the emerging analysis to see how it resonated with them. Interviews were conducted with four other participants in the three-part interview guide framework over two lengthy interviews. Member checking was completed for five participants.

Skype and telephone interviews were digitally recorded. Recordings were transcribed into a written transcript in order to get an accurate record of what participants said and to review the material for coding and analysis. Interviews were transcribed by a professional transcription service that signed my university's IRB confidentiality agreement and met its criteria for handling data. At the conclusion of the interviews and member checking, I sent a thank you email to each participant for her contribution to my dissertation research.

Data Analysis

Established by Glaser and Strauss (1967) and described earlier in this section, the following strategies, consistent with a constructivist grounded theory approach, were used for analysis:

- Conduct data collection and analysis simultaneously in an iterative process
- Analyze actions and processes rather than themes and structures
- Use constant comparative methods
- Draw on data (e.g. narratives and descriptions) in service of developing new conceptual categories
- Develop inductive abstract analytic categories through systematic data analysis
- Emphasize theory construction rather than description or application of current theories

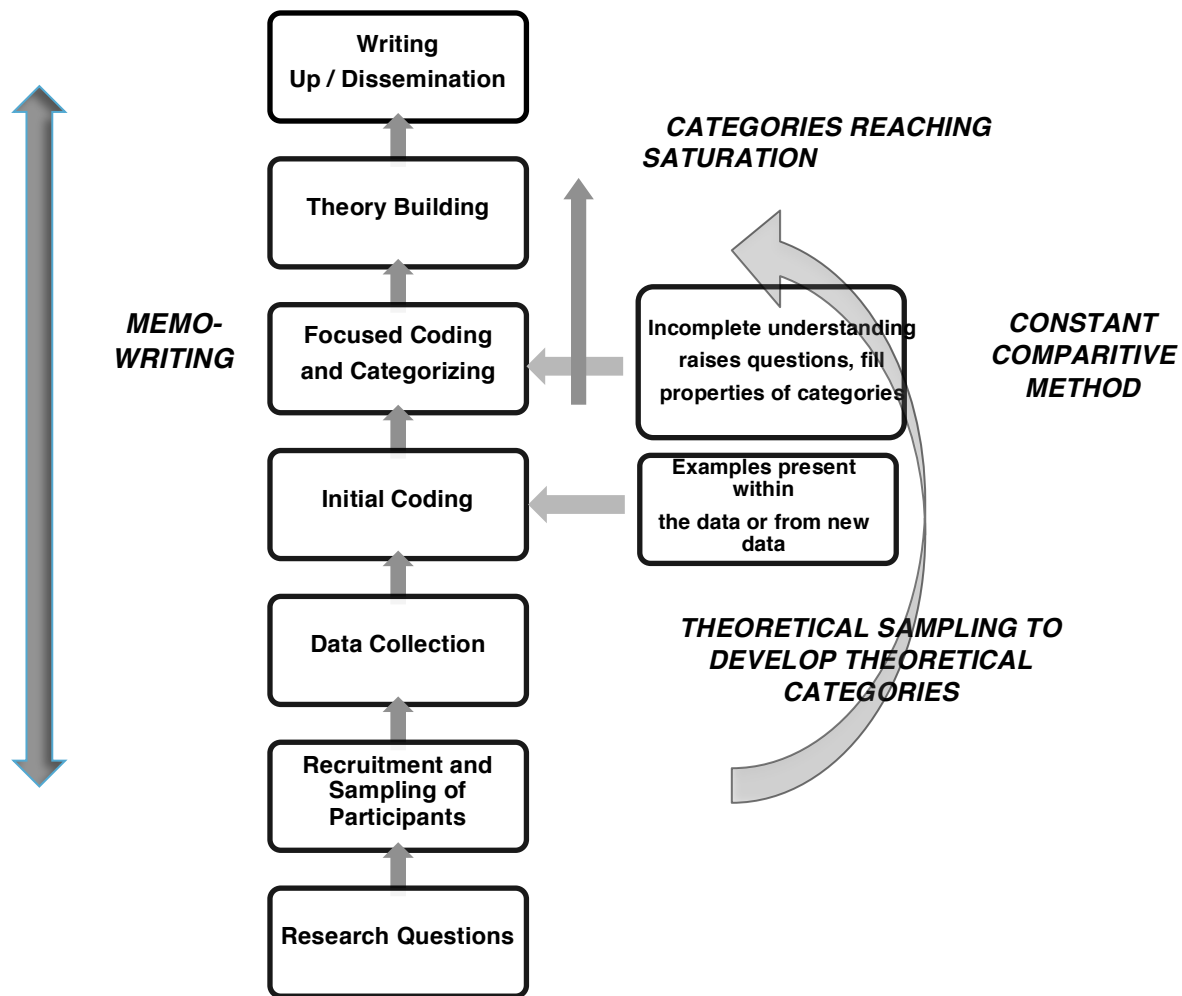
- Engage in theoretical sampling by obtaining further data to refine and fill out major categories
- Search for variation in the categories or processes
- Pursue developing a category rather than covering a specific topic

(Charmaz, 2014, p. 15).

In a modified approach to Glaser and Strauss (1967), Charmaz views the first five bullet points above as evidence of a grounded theory study. In her view, “using inductive data to construct abstract analytical categories through an iterative process differs from sorting topics, as is common practice in general approaches to qualitative research” (2014, p. 15). Charmaz acknowledges that in practice few researchers show evidence of conducting theoretical sampling and of constructing theory (2014, p. 15).

A semi-structured interview design provided structure to the wording of questions that assisted in developing new conceptual categories (Seidman, 2013; Charmaz, 2014). Analysis began as soon as data became available and was coded in categories and subcategories emerging from participant answers to interview questions (Schram, 2006, p. 101). A visual representation of grounded theory as applied to this study is presented below in Figure 1.

Figure 1. A Visual Representation of Grounded Theory



Source: Charmaz, 2014, p. 18.

Grounded theorists study early data to separate, sort, and synthesize these data through coding (Charmaz, 2014). To code in this way means to attach labels to segments of data depicting what each segment is about. Through coding, analytical questions arise about the data from the very beginning of data collection (Charmaz, 2014, p. 4). According to Charmaz (2014), “coding distills data, sorts them, and give us an analytic handle for making comparisons

with other segments of data” (p. 4). Coding means categorizing segments of data with a short name that summarizes each piece of data (Charmaz, 2014, p. 111).

Grounded theory coding practices link collecting data with developing an emergent theory. Charmaz provides guidelines for two phases of coding – initial coding and focused coding. Strauss and Corbin (1990, 1998) use terminology of open coding, axial coding and selective coding; however, Charmaz prefers to keep codes simple, direct, analytic, and emergent (Charmaz, 2014, p. 19). I used Charmaz’s guidelines for initial and focused coding.

Initial coding was done to study fragments of data such as words, segments, statements, and observations for their relevance in pursuit of developing categories (Charmaz, 2014, pp. 109-111). It is also acceptable to adopt as codes terms used by participants’ while describing/telling their own stories and I relied on terms used by participants in the process of initial coding. The goal of initial coding was to remain open to all possible theoretical directions indicated by reading the data. By coding in categories and subcategories, the most salient themes began to emerge from participants’ interviews.

Focused coding is the second phase of the coding process and was used to pinpoint the most salient initial codes. Focused coding is selective and allowed for narrowing the most significant and frequent initial codes to sort, synthesize, integrate, and organize findings presented in this chapter (Charmaz, 2014). Focused coding was used to pinpoint and develop the most salient codes (Charmaz, 2014).

Charmaz believes that grounded theory coding need not be complex (2014, p. 115). By engaging in coding early in the research process, I was able to identify which codes to explore as tentative categories. Focused coding allowed the process of constant comparison –

reviewing data and memos, making sense of it, sorting, diagramming, and organizing into categories – to begin.

Constant comparison was used to establish analytic distinctions and to make comparisons at each level of work (Glaser & Strauss, 1967; Charmaz, 2014). It was important to compare data to find similarities and differences. This was done by comparing interview statements within the same interview and across interviews of the same participant, as well as comparing interview statements of other participants to each other, in order to find similarities and differences (Charmaz, 2014). I closely followed the processes of doing grounded theory.

Quality

I used the criteria of trustworthiness as defined by Lincoln and Guba (1985) to address quality issues. Trustworthiness has four criteria – *credibility*, *transferability*, *dependability*, and *confirmability* – each is described in detail below. For enhancing trustworthiness, I incorporated the following strategies as described by Lincoln and Guba (1985) and Creswell (2009): prolonged engagement, using rich/thick text reflecting the data, member checking, an audit trail, peer review, and clarifying bias.

Criteria for Trustworthiness

Credibility is defined as having confidence in the truth of the findings (Lincoln & Guba, 1985). By ensuring credible interpretation of the data showing that participants' perspectives are representative of what was presented to me. The criteria of *transferability* relates to how the findings of this research are useful to other settings, providing readers an opportunity to evaluate the extent to which conclusions drawn can be transferrable to other settings (Lincoln & Guba, 1985).

The criteria of *dependability* demonstrates that findings are consistent and can be repeated (Lincoln & Guba, 1985). To demonstrate *dependability*, I have documented my process in a logical way. The criteria of *confirmability* establishes a degree of neutrality; findings have been shaped by participants and without bias on my part (Lincoln & Guba, 1985).

Strategies for Strengthening Trustworthiness

The strategies for strengthening the criteria for trustworthiness are described below. Pertinent for trustworthy data and analysis are the strategies of prolonged engagement, using rich/thick text reflecting the data, member checking, audit trail, peer review, and clarify bias.

Prolonged engagement with participants via the interview sequence provided a rich description of first-hand experiences of study participants. While my engagement was not as it would be for an ethnographic study, the length and detail in the interviews provided depth. I quoted generously from interview transcriptions to ensure that writing and analysis were unbiased and that data were properly interpreted. As stated earlier, *member checking* was done at the end as a short interview via a brief telephone conversation to ensure that interview data was presented accurately (Lincoln & Guba, 1985).

Noting that difficult issues can arise at this point, Siedman (2013) suggests offering to share with participants any material that concerns them. In working with the interview data, I was careful to do nothing to misrepresent or inaccurately report participant stories. With exception to issues of vulnerability and inaccuracy, Siedman (2013) suggests retaining the right to write the final report as the researcher sees it (p. 100). This is the member checking approach that I used. When speaking with participants' during member checking conversations, I reviewed for accuracy data points related to emerging categories and subcategories to be

presented in the findings to confirm that I had not misrepresented or inaccurately reported information about them.

The *audit trail* is a system of documentation that provides a logical and traceable description of the research process and analysis, as well as creates transparency by keeping step-by-step records of the research process from beginning to end (Lincoln and Guba, 1985; Creswell, 2009). All documents, memos, and notes related to recruiting, scheduling, and communicating with participants, as well as those related to sorting, analysis, coding schemes, diagrams, and other materials are being maintained and preserved as evidence of process. Keeping records from the beginning of the study to the development and reporting of findings provides a clear description of the research path and rationale for decisions about design, data collection, analysis, and reporting (Lincoln & Guba, 1985, pp. 309-310). I engaged in *peer review* throughout the research process by sharing sections, chapters, and emerging analysis with program classmates and used a positionality statement to *clarify bias* and reflect on my own subjectivity that could have influenced the study.

Ethical Considerations

Schram (2006) identifies four key ethical considerations of qualitative inquiry related to minimizing risk, impression management, disclosure and exchange, and disengagement. No potential ethical issues arose while conducting this research. Below I describe how I addressed each of Schram's considerations.

To *minimize risk*, individual participants are not identified by personal identifying information that would reveal who they are and pseudonyms are used in the transcripts and write-up to disguise all personally identifiable details. As stated earlier, interviews were

transcribed by a professional transcription service. Transcribed data is password protected and will be kept secure for three years after the dissertation is completed should I need to revisit the data. Recordings were kept as password protected digital files on a computer used only by me. Recordings were destroyed after interviews were transcribed and checked by me for accuracy. Participants shared some personal information about themselves during interviews, but is not presented in this report as the information did not add anything to the findings and presenting personal information would be unethical on my part.

Impression management (i.e. posturing and presentation of self) was done by conducting myself in a professional manner and maintaining integrity and authenticity when engaging with participants at every stage of the research process (Schram, 2006, p. 138). Establishing trust through the tactics of impression management was quintessential to the research process and I adhered closely to these ethical considerations when engaging with participants.

In consideration of how much (i.e. *disclosure*) and what types of information to share with participants (i.e. *exchange*), and for what reason, I established clear boundaries of inquiry and spoke truthfully about the study, but not fully about the intentions of the study, as partial disclosure ensured that participants responded naturally (Schram, 2006, p. 141). Ethical standards and requirements of informed consent, do no harm, and confidentiality required that I did not misrepresent the purpose of the study or engage in any deceptive practices to acquire data (Schram, 2006, p. 142).

I did not engage with participants in activities outside the research purpose as defined by parameters established through IRB approval. *Disengagement* was done by concluding the

work on good terms and by not misleading participants into believing the relationship would extend beyond researcher-participant (Schram, 2006).

Positionality Statement

Research indicating that graduates of women's colleges are advancing at greater rates than female counterparts at coeducational institutions in the areas of career advancement, careers in traditionally male dominated fields, and higher salary compensation (Nelson & Rogers, 2004) initiated my original question of: "what is happening at women's colleges that makes them a different or unique experience for female undergraduate students?" This initial question led to my research question.

I remain intrigued by the design, intentions, and context of the women's college environment as a space for emotional and intellectual development for young women. My research approach was to know if it is something about the women-centered environment that creates greater opportunity for alumnae or if it is merely the selective nature of private educational spaces.

As a Gen X Caucasian female from a working class background, and among the first in my family to attend college, I expected my perspective to be very different from the women whom I interviewed for this study. I attended a coeducational public institution and graduated more than twenty years ago. Furthermore, I am completing a doctoral degree at a private co-ed institution who is also a married mother of one female child. Despite working class beginnings, I am now a senior level higher education professional at an Ivy League institution and have had a successful career in business, government, and higher education, thus my age and professional success could have potentially created a power imbalance, or not, depending on the careers

and social positioning of the participants. It was possible that participants may have felt intimidated by my seniority, professional success, and personal accomplishments, or perhaps see me as a potential role model. Alternatively, participants could have felt that they are being judged as elitist or that they have power given the pedigree of their education. I did not experience or become aware of either of these potential scenarios during my engagement with study participants.

My extensive experience with graduate students (in my work environment) of similar age to these participants assisted in navigating social distance that might have existed as I am familiar to some extent with their broad range of experiences, needs, and concerns. Specifically, my experience with graduate students at Northwestern University and the University of Chicago ranged from twenty-two to sixty-two with the majority between age twenty-two and thirty-two, the approximate age of my participants. Furthermore, I am an effective communicator capable of meeting others where they are.

Conclusion

Building on the literature review, this chapter describes the grounded theory research approach I used to collect and analyze data. In accordance Charmaz's approach, data collection and analysis were done simultaneously in an iterative process. I used constant comparative methods to analyze actions and processes; drawing from participant narratives to develop conceptual categories and subcategories. Additional data was obtained as needed to refine and fill gaps within categories. A flexible approach enable me to pursue emerging categories rather than zeroing in on predetermined or specific topics.

CHAPTER 4: FINDINGS

To understand how women's college alumnae participating in this study explain and make meaning of their experiences, data were coded in categories and subcategories. The most salient themes to emerge from participants' interviews were related to expectation to attend college, college readiness (academically and socially), the college selection process, and the women's college experience. These categories emerged in an unstructured way, but are organized here in what I believe to be the most logical way to present data and tell participants stories.

Introduction to Participants

To best position findings for interpretation and understanding throughout this chapter, a presentation of participants is provided. To maintain ethical integrity, pseudonyms are used in lieu of participant names. Given the small number of colleges represented on the Carnegie Classification of Institutions list for selective women's colleges, the smaller number of colleges attended by the participants, and the risk to identifying participants from a very small sample, neither individual college names nor pseudonyms are used in this report.

Alice is African-American and grew up working class in a large city. She attended a private all-girls independent school until her senior year when the school transitioned to coed. Alice felt very prepared for the leap from high school to college, experiencing only mild anxiety and homesickness during her freshman year. Alice always felt like a token in her predominantly Caucasian k-12 schooling environment and specifically sought an HBCU; she was open to a single-sex or coed college. Her major was philosophy with a minor in business. Since graduating from college Alice returned home to work for a few years prior to attending law school for a joint JD/MBA.

Sabrina is Caucasian and grew up working class in a mid-size city. Sabrina attended public schools. As an honors student and athlete, Sabrina felt socially and academically prepared for the leap from high school to college. Her major was biology with a minor in

history. Since graduating from college Sabrina earned a Master's in Public Administration degree from a public university.

Kate is Caucasian and grew up low income in a rural community. She was homeschooled and felt isolated by her surroundings and educational experience. Kate was eager to leave home and enter the world. She felt academically prepared for the leap from home to college, but initially struggled with some of the social aspects of residential college life. Kate majored in classics and will soon complete a master's degree in speech pathology at a private university.

Nina is Caucasian with a strong identity reflecting her Jewish heritage. Nina grew up in upper-middle class suburbs of large metropolitan areas. She attended public schools in affluent districts and felt socially and academically prepared for the leap from high school to college. Nina majored in political science with a public health minor and completed a Master of Social Work degree at a private university.

Edie is Caucasian and grew up upper middle class in a mid-size city. She attended coed parochial middle and high schools and a public elementary school in a good district. Edie felt socially and academically prepared for the leap from high school to college and jumped right into all aspects of residential college life. She majored in chemistry, earned a master's in biotechnology, and will soon complete a doctorate degree in biomedical sciences at a public university.

Chloe is African-American with strong immigrant community ties. She grew up low income in a large city. She attended public coed schools that she describes as woefully inadequate. Chloe felt socially prepared for the leap from high school to college, but struggled academically. Chloe attended college near home and did not feel anxious about living on campus. She majored in chemistry and will soon complete a master's degree in biomedical sciences at a private university and plans to apply to medical school next year.

Jennifer is Caucasian and grew up upper middle class in a mid-size city. She attended coed public school in a suburban district. Jennifer felt socially and academically prepared for the leap from high school to college, but was focused on attending college within proximity to home. She majored in psychology and minored in biology. Jennifer has completed a fellowship at an Ivy League university and is completing a doctorate program in psychology at different private university.

Renee is Caucasian and grew up in a small middle-class community outside of a mid-sized city. Renee attended coed private elementary school and a large regional coed public high school. Renee felt socially and academically prepared for the leap from high school to college. She majored in environmental studies, entered the workforce after graduation, and has advanced professionally since.

Overall, the participants grew up in nearly all regions of the US: the Northeast, West, East Coast, Midwest, Mid-Atlantic, and the South. Their backgrounds, interests, and experiences were different enough from one another to add rich context to this study. Furthermore, their lives post-graduation allowed for better understanding about how the single-sex environment is experienced at a second-tier women's college.

Expectation to Attend College

Unrelated to socio-economic background, regional difference, or level of family involvement in selecting and paying for school, all eight participants were expected to attend college. With exception to one participant, attending college was simply assumed. Expectations to attend were influenced by parents and relatives, neighbors and community members, and advisors and coaches. College affordability was a concern for all study participants and, to some degree, impacted college choice as scholarships, financial aid packages, and portable tuition programs were factors when making final decisions about where to attend.

Assumptions about the purpose and outcomes of attending college were clear. For most participants the purpose was to advance intellectually and prepare for the working world, either through entering the workforce post-graduation or pursuing advanced academic study.

Kate's situation was different as her father took a dim view of intellectuals:

It was kind of a touchy subject. I do think in general they expected that I would go to college, but also my dad wasn't thrilled about that. He is from...the backwoods...and he takes a dim view of intellectuals in general. He wasn't thrilled about the idea of me going. He wanted me to get a degree and be able to make money, but he wasn't thrilled with me becoming academic in any way. My mom always assumed I'd go to college because I liked school and I was bright.

Changing one's standing in society and cultural orientation were driving factors for Alice, Chloe, Kate, and Sabrina. These participants expressed having a part in sorting out a college financing plan, but none expressed a view as pragmatic as Nina:

It was expected that I would graduate from high school and it was expected that we went to college. I grew up knowing that I was expected to pay for college my own way, that my family would support me when they could, but that the majority of the college cost would be my responsibility, because my mom and my aunt had both put themselves through college, but yes, it was expected.

None of the women participating in this study expressed much concern for the coed social aspects of college. Renee described this sentiment best, but identified that entering a women's only environment could be unnerving.

That was not a driving factor, but it was a small deterrent and I had to really psych myself up for it because I did not have a lot of close female friends in high school. I approached it as a 'Well, this is perfect for me and I just will see how the whole women's college thing works out.' Because everything else was great. I wasn't nervous about the lack of social life. I was not a particularly social high-schooler. I wasn't nervous about not meeting guys. I wasn't super into that so it didn't bother me so that was off the table.

Only Nina intimated a longing for feeling like she may have missed the opportunity to find a mate by attending a women's college.

...I didn't even notice that there weren't any guys in my classes or anything like that...I sort of dated, but I didn't have a boyfriend when I [was in college], and I think that is the only thing, especially now that I'm nearing my thirtieth birthday, and I'm not married and I'm not in a relationship, the one thing that I do feel like I kind of missed out on.

College Selection Process

Two participants intentionally included women's colleges as part of their college visit plan, while two others were open to exploring women's colleges as part of their selection process. Four participants were not seeking a women's college and were surprised by being

drawn to their college of choice as the result of their selection process. All of the women's colleges explored by these women were from either the selective/second tier classification or not ranked. None of the participants in this study applied to a top-tier women's college or an Ivy League university.

Alice attended a private independent girls middle and high school that became co-educational in her senior year. She cited the academic and social differences experienced by adding boys to the classroom, and for that reason, was including women's colleges as part of her college visit plan.

I did like it better when it was single sex because I just feel like it's a better learning environment personally, so like when it's coed, the females worry about the wrong things. Before it was, I don't really have to dress up, put on makeup. We're all girls. We come here to learn. And then when you introduce guys, that's when the education to me turns into something a little bit more. But I got through it.

Kate's interest in exploring women's colleges came from a different perspective. Due to her upbringing in an isolated rural environment where she was homeschooled by very religious parents, Kate thought that she would feel more comfortable in a single-sex environment.

I ended up going to [my college] because I knew I didn't want to stay where I was because it is not a place to accomplish much of anything. Because I was homeschooled, I knew that I didn't want to jump right into a big university or a big city or anything like that. I had friends online who went to a couple of different women's colleges and I went to visit them...and decided it was a good compromise between being isolated and introducing myself to the world...Because of my religious upbringing, I was uncomfortable with sexuality in general. I felt a lot safer at a single-sex college, not having to worry about any kinds of pressure or unsafe situations.

Jennifer and Renee were both open to exploring women's colleges during the selection process, and for Renee, two women's colleges made it onto her "top five" list. Jennifer specifically sought colleges within close proximity to home. One women's college met the

criteria, along with a large state university and several other small liberal arts colleges. Any fears that may have existed about academic quality, institutional reputations, etc. were diminished during the campus visit when she learned about the number of women entering graduate programs at places like Harvard Business School, medical and veterinary school. Jennifer was further impressed with academic resources of the college.

I heard that they had an honors program. I was like 'great, I could do that.' Then I saw their library and the library was a big thing and their library was just beautiful. It's like there were rooms in it that were just very cozy and I could see myself there. I was quite happy with it.

Two women's colleges were on Renee's list of "top contenders," both from the selective/second tier classification, one that has since become coed. One coeducational college was quickly ruled out after a campus visit when Renee learned that the basement of the only all-women's dormitory served as a hospital during a famous Civil War battle and was deemed haunted by ghosts from the battlefield. She also wasn't very excited about one of the women's colleges after visiting as it was in a city that felt too congested and lacked quality library resources that she expected.

I was a little disappointed. It was a little bit more urban [congested city] feeling than I wanted. It was beautiful. I loved their volunteer, their sense of community. I liked that it was small, but I was really disappointed by their library because when you walked in, it was kind of musty and in the basement, and it felt like a very small town library.

However, Renee's college visit to the college she ended up choosing was a stark contrast and she "fell in love" with the campus and the library, though the single-sex aspect could have deterred her if she hadn't found so many other positive academic attributes.

I think it was my mom that was really interested in women's colleges and I was more interested in small. It just so happened that good small colleges tended to be women's

colleges. I did not intend to go to a women's college, but the more I learned about it and the more time I spent on campus as a prospective student, the more I preferred it.

Edie's story is different. Her interest in a women's college was sparked by outreach from the college during her junior year of high school. It felt personal and she felt a connection to its traditions. However, her parents were dismissive and discouraged her pursuit of this single-sex college as an option.

And so I go downstairs one day and I'm like 'all right, mom and dad, these are the places that I'm narrowing it down to,' and I was like, 'this college is one of them,' and my parents looked at me and they're like, 'Edie, this is a...finishing school. You want to be a scientist.'

Edie's parents were adamant that this college would not be the right place for her. She had to convince them of the academic quality of the institution citing high levels of faculty engagement, advising resources, opportunities for undergraduates to engage in research and senior honors thesis projects, and graduate school placement metrics. After several campus visits where her parents met with the dean and members of the faculty, Edie's parents relented and threw their support behind her choice.

Chloe, Nina, and Sabrina were raised in very different communities on different points of the socio-economic index. Chloe is from a low income urban environment and the first in her family to attend college, Nina is from a metropolitan suburban community of affluent college-educated professionals, and Sabrina is from a post-industrial working class mid-sized city where she too was the first in her family to attend college. None of these women were seeking a women's college at the onset of their selection process and were surprised by being drawn to

the single-sex environment. In describing the college that she ended up choosing and the level of expectation to attend, Chloe stated:

I went to visit ... and fell in love with the campus...everything is new. It looks like a college. It was just like they were up on technology. The classrooms and the campus are beautiful. It's a small school...I could see myself there. I could see myself at this college.

My culture, my parents, my community, they set very high expectations. If I decided for some reason I wasn't going to go, I wouldn't just have to answer to her [mom], I'd have to answer to her nine brothers and sisters, and then answer to people at my church. It wasn't even an option not to go to college.

Similarly, Nina identified a moment when it was clear that "this is it" and being a single-sex college was secondary to feeling welcome and comfortable on this particular campus.

I remember there was just this moment where I was like, this is it. And the fact that it was all women kind of really didn't matter to me because...it's not like I'm going to school in the middle of nowhere and it's single-sex.

Sabrina also identified feeling a meaningful connection to the college she ended up choosing and described her role models.

It never entered my mind to look at a women's college, never at all...how it happened I don't really know. I think those were the people who reached out to me the most...you want to know that you're going to be able to reach your goals in this environment.

Neither one of my parents went to college, and I just think I had neighbors...whose kids were probably like ten years older than me...they took care of me after school and I saw them doing homework and stuff like that. They lived at home during college, and so to me, they were kind of my role models for that...I don't think my parents pushed me at all, but it was basically expected.

As demonstrated by these findings, and Nina's statement below, a single-sex environment was not a driving force in the college selection process for these participants.

The fact that my college was single, single-sex...It was definitely the only single-sex school that I looked at, but it didn't even phase me at all, and so I had no perceptions of it. And I ended up loving it because you're kind of forced to have close female friends, and so for me, it actually really helped me establish these amazing relationships with

women that I think I may not have gotten or learned to have had I not gone to a single-sex school.

Participants' trajectories toward applying to and selecting a women's college were varied; however, across the group decisions to attend a women's college hinged on feelings of belonging and fitting in, quintessential historic campuses with high-quality resources, academic rigor, and small college environment, and to a lesser degree, perceived ideas about sisterhood as facilitated by a women's only environment. The single-sex nature of the colleges was never a first priority and, with exception to one participant, was not a prominent characteristic in the decision-making process.

College Readiness and Adjustments

As presented in the literature, academic rigor and high performance expectations are characteristic for this grouping of selective women's colleges, as defined by the Carnegie Classification. Given the variety of high school experiences and environments that participants came from, college readiness in general, as well as readiness for a single-sex environment, were considerations. Only one participant out of eight felt that she was not academically prepared for college level work. While most of the others attended high performing high school programs, Chloe grew up in a low-income urban community with a woefully inadequate public school system and described her experience:

I went to [urban] public schools. The only reason why I mention that is because that had a very significant impact on getting through college. I struggled a lot. My high school didn't adequately prepare me for college. I was a pretty good student in high school. I got good grades. I didn't struggle, but once I got to college I realized how much, how behind I was ... in high school, I did fairly well. I won a lot of scholarships before I went to college.

Kate was the only participant who felt unprepared for the social and co-living aspects of college. Kate was homeschooled in an isolated rural environment whose social network was predominantly linked to online friendships made through internet-based schooling programs. Despite having traveled a bit throughout the United States and a summer-before-college school-based trip to Greece, Kate still had a lot of adjusting to manage during her first year of college. Kate's first year of college was challenging from a social and class perspective.

It was pretty challenging at first. It was challenging to have a roommate, especially a roommate from a vastly different socio-economic class than I was...it was hard for me to negotiate living with her. I didn't really have good skills for dealing with little things like listening to music or too much light. There were a lot of things that I had to adjust to. It was my first time trying to figure out how to live successfully, even in a really sheltered environment.

Other participants expressed difficulty with freshman-year roommates, homesickness, and mild anxiety, but most felt academically and socially prepared for the transition from home to college. Contributing to feelings of comfort were welcome ceremonies at the colleges, First Year Experience programming, dedicated upper class-women to help new students navigate the campus environment, and an introduction to longstanding traditions. Participants also described how quickly fears or anxiety were allayed once they were settled into freshman year, joined clubs and organizations, and carved out a social circle.

Women's College Experience

Six out of eight participants reported that the single-sex nature of the environment is the reason they had a positive educational experience. While choosing to attend a single-sex college was nebulous for most participants, several experienced a defining appreciation for the single-sex environment once leaving college and entering coeducation graduate programs and

other male-dominated employment structures where young women were expected to know their place.

Alice attended an all-girls high school until her senior year and felt at home at a women's college. Like most of the women participating in this study, she felt that she didn't have to worry about distractions and that classmates were more engaged in meaningful content-based conversations, asked more probing questions, and gained more knowledge in an all-female academic setting.

That's just the way I learn, because I feel like we question more when we don't have to worry about someone saying, 'Oh, that's a stupid question,' or 'You're stupid for asking that.' We didn't do that to each other. We tried to explain questions further and get into details and articulate ourselves in a manner to where we weren't being disrespectful towards each other.

Alice's high school became coed during her senior year. She described the experience as a changed learning environment where female students spent more time worrying about how they dressed and looked than they had before when it was an all-girls school. Alice found this shift frustrating, but reflects positively on her high school experience overall.

Kate provides one example of feeling more comfortable interacting with other women in an environment where she could express her thoughts and opinions without worrying about what others were thinking about her in unrelated ways. Kate realized that while her comfort level was more related to the social aspects of college and potentially stressful situations with male students, the women's only environment impacted her ability to function academically. Kate found freedom in being able to say what she was thinking and not worrying about how she would be perceived.

Edie, Sabrina, and Nina expanded on the impact of a women's only academic environment when they told their stories about entering coeducation graduate programs and other male-dominated work environments. All three felt extremely well prepared academically for graduate study due to rigorous female-centered undergraduate programs. Sabrina was simply surprised by the lack of rigor in her coeducation graduate program when many students would simply "BS their way through readings and discussion."

Now that I've spend a lot of time in co-ed or primarily male scientific environments...I think in my major in a co-ed environment, in a very big environment in particular, I would have been very discouraged by the attitudes that I tend to see from people now had I seen them as an undergraduate. – Edie

Nina described how her belief in having a voice hurt her in her first professional work environment where male bosses expected junior staff members to know their place and keep their opinions to themselves.

And I remember that being shocking to me, because for four years I was taught, 'if you want to say something, that's perfectly fine, and we'll listen to you, and you have the right to your opinion, and if you want to say something, go ahead, and we'll respect you for that,' and to have male bosses who were like, 'You don't know your place, you need to sit there and be silent because you don't have the right to object or say anything,' that was a really harsh reality to come to.

Alice attended a women's college where cross-registration with co-ed or men's single-sex colleges and described her experience in male-dominated classrooms as very different from the single-sex classrooms. She described an environment where her opinions slid to the back of the room and she often felt like male classmates "ganged up" on her because she brought a different perspective into class, acknowledging that men attending some of the female-dominated may have felt the same way. Alice felt strongly that women at her college were

“taught to think differently, taught to question, not just to sit back and take it for what it is.”

Many male students didn’t expect to be confronted in this way by intelligent young women.

While not all participants were interested in traditionally male STEM-related fields, all felt they had ample opportunity for exploration, regardless of major. Alice, Edie, Jennifer, and Renee all described opportunities to explore traditionally male-centric courses, either as a novice or, in Edie’s case, by major and career choice. Jennifer was able to take an engineering course her freshman year and attributes this opportunity to the “no boundaries” approach at women’s colleges. She also cited opportunities in the theater program for women to assume roles often reserved for men in the professional theater world where they manage the technical aspect of production, set and costume design.

I don’t think I had a lot of expectations about how important it would be for me to see women in leadership [traditionally male] roles. I think it was important. The theater thing is what sticks in my mind.

Edie attributes being thoroughly trained to pursue her goals without worry of sexist backlash as influential to her career choice. Having the opportunity as an undergraduate to use electron microscopes and conduct research usually reserved for graduate students also had an impact. Alice cited cross-registration as the primary opportunity for exposure to business classes where she received messages that business was a male centric discipline.

For every participant, the single-sex college experience instilled confidence. From the data, only one participant expressed lacking confidence going into college though she believes that she emerged strong and empowered. Seven out of eight participants entered college confident women who continued to mature through a supportive educational experience.

Junior year and senior year, my comfort level really grew and so did my confidence. My junior year, I just felt incredibly confident. I knew what I was doing. I felt like I had a voice in the [school] community. – Kate

It felt like this place that was a little less judgmental than any college environment and allowed me to build confidence about being accepted at face value rather than on my appearance. – Jennifer

As you got older, you were more outgoing. You knew what you needed to say and how you wanted to say it and how to read that document that you were reading, but they never discounted you...You could take all sides of an issue...and delve into what it could mean if you looked at it from a different perspective, and I think it just opened your eyes to a lot of things. – Sabrina

Female students attending second tier women's colleges experience the single-sex environment differently from each other. Findings show that the experience is very school dependent, demonstrating that those women who attended a women's college with a strong "sisterhood culture" had a different experience from those who attended women's colleges with a less defined culture of sisterhood.

Specifically, women attending a women's college in a urban location felt that the single-sex environment was diminished (despite marketing and branding campaigns suggesting otherwise), in part due to the physical proximity to many other co-educational institutions and partnerships that promoted heavy cross-registration with the co-ed institutions. Women that attended women's colleges in more geographically isolated locations, or a college with a racial identity, had a different experience that was more women-centered around ideas of empowerment, confidence, leadership, and sisterhood.

They [the college] don't brainwash you, but they instill their principles that they were founded on from day one, letting you know this is a sisterhood, letting you know that at any time you need assistance, we're here for you. – Alice

Sabrina referenced the concept of sisterhood within the context of the college having met all of her other requirements i.e. rigorous academics, athletic program in her sport, social groups, etc. and defined sisterhood as knowing that you are supported by those women with you now and those who came generations before you:

I think all of those things were checked plus that sisterhood, that you immediately come on campus and know that people have your back, and people who graduated sixty years before you have your back.

Additional findings suggest that socio-economic status and diversity differences were common and noticed, but did not completely define these environments. None of the participants mentioned SES or ethnicity as being threatening or exclusionary, though all indicated that among their inner circle of friends they self-selected to women with similar backgrounds and mostly stuck to those peer groups throughout their college experience. Chloe and Sabrina both described class differences that impacted, but did not define, their college experience. Chloe stated that many women from her college were from very privileged backgrounds and that she never felt like she could relate to them because of where she is from. She indicated that she didn't have time for the "whole sisterhood thing," suggesting that it was a luxury to think that way, and that she gravitated to a group of friends who felt the same way.

Sabrina recognized that there were few people like her from working class families, but she felt that having classmates from all different levels of the economic spectrum is what made college life interesting and that she learned a lot about how to navigate the real world because of it. That being said, she too gravitated toward a group of friends from similar backgrounds, not because she felt that she couldn't relate, but because it's where she felt most comfortable.

Alice and Renee both recognized the effects of race on their college environment. While acknowledging that her college was very homogenous when she attended, Renee described how it was becoming more apparent that the college was trying to diversify, both socioeconomically and racially.

If I had been a minority or someone from a less privileged socioeconomic background, I would have felt very out of place. I am now very good friends with people that were of different socioeconomic backgrounds than me, and my impression from their experiences is that it was not as welcoming as it could be.

As the only participant who attended an HBCU, Alice expressed feelings of appreciation for not being the “token,” as had been her experience in an all-girls independent private, and predominantly white, high school. As described above when Alice spoke about a culture of sisterhood, these feelings were within the context of race and gender.

With going to an HBCU...it was wonderful to not be the token. I felt like throughout all of my school experiences I was just the token. I wasn't the token there...I would say the majority of us were tokens at the high schools we went to, so we had discussions about that in some of my classes

Conclusion

These findings highlight the experiences of alumnae who attended second tier women's colleges from 2005-2015. While the single-sex issue seemed to be, at best, a secondary consideration in their original interest in college, it may have, conversely, helped with their adjustment to college, particularly where there were adjustment challenges. Participants named a number of characteristics in the single-sex environment that likely helped, such as being a supportive and encouraging environment. Social life wasn't mentioned as a distraction to their academic focus, as is often a stated dynamic in coed environments (Kinzie, et al., 2007). An in-depth discussion of these findings is presented in Chapter Five.

CHAPTER 5: DISCUSSION

Existing research presented in the literature review helped us better understand the broader issues in higher education related to the history of educating women and the role of women's colleges in the U.S. system. To better understand women's experiences in a stratified women's college environment, this chapter focuses on the analytical points derived from themes presented in Chapter Four. These points relate conceptually to belonging and becoming, the first generation experience, and similarities and differences between first and second tier women's colleges.

Belonging and Becoming

To contextualize the experiences of the women who participated in this study, it is important to understand the markers that define belongingness, as well as the role that class plays in constructing the markers. The markers that define belongingness are feelings of academic and cultural unpreparedness, social segregation, a sense of being overwhelmed or intimidated by the environment, feeling isolated, or financially hard-pressed (Luttrell, 1994; Ostrove, 2003), as well as aspirations and goals for social mobility. According to Ostrove (2003), college is experienced differently based on class background and individual expectations for social mobility.

Early in the college selection process, participants expressed their individual sense of belonging on the campuses that they eventually chose. Jennifer found comfort and a sense of belonging at her chosen college upon recognition that the library resources would support her goal to participate in the honors program. Kate identified her selected campus as a place of belonging because it was small, rural, and women-only. Renee fell in love with her campus

because it felt like the kind of campus that she had imagined, accompanied by impressive library and other academic resources. Other participants expressed similar reasons for why they anticipated feeling like they could belong on their selected campuses.

As indicated in the findings, Kate felt more comfortable interacting with other women in an environment where she could express her thoughts and opinions without worrying about what others were thinking about her or how she would be perceived. The single-sex environment was key to Kate's sense of belonging. Alternatively, while Edie's felt that the college she chose was a place where she belonged, her parents didn't believe that it could meet her academic needs.

Alice's experience attending an all-girls independent high school until her senior year facilitated feeling at home at a women's college. She too expressed belonging in an environment where she felt that she didn't have to worry about being judged and could engage more meaningfully with female classmates that she had experience in co-ed high school and cross-registration college scenarios.

Differences in socio-economic status and ethnicity/race were common and noticed, but did not completely define these environments. Participants did not express feeling threatened or excluded by socio-economic status or ethnic differences, though all indicated that among their inner-most circle of friends they self-selected to women with similar backgrounds and mostly stuck to those peer groups throughout their college experience. They all located themselves in the broader social environment based on social class, although they also crossed class lines frequently, and developed their abilities to engage with a broader variety of people than they did in high school.

Jennifer went the furthest in naming a clear marker of wealth and what class-based markers signified: “If you could own your own horse and keep it at school, that also meant that you weren’t getting any financial assistance on tuition. You would know that anybody who had her horse there was much richer than you.” As stated in chapter four, Sabrina, a student from a working class background, described a college environment where there were only a handful of people with working class backgrounds. While knowing women from across the spectrum made for a meaningful college experience, she also self-selected into a circle of friends with similar class backgrounds.

As demonstrated in the findings, Chloe felt that she was not academically prepared for college level work and would have benefited from attending community college prior to enrolling. Chloe grew up in a low-income urban community with an inadequate public school system, which she believes had a very significant impact on her success at college. Despite being a very good, hardworking student who won several academic and merit-based awards, she does not believe that her high school prepared her for college.

Chloe further described an environment where many of the women she attended college with were from very privileged backgrounds and with whom she never felt like she could relate. She self-selected into what she described as “an awesome group of friends,” but that this idea of women’s college as sisterhood was not something that was relatable to her. Coming from a low-income background with aspirations for intellectual and social mobility, the stakes were too high and she was there with a purpose. In hindsight, she appreciates the value of the environment, but could not fully embrace it at the time due to what she perceived to be a necessary focus on only the academic aspects of college. Other study participants felt like

they belonged in the environments they selected for reasons previously cited in chapter four – meaningful interactions with faculty, mentors, clubs and organizations, and social inclusion.

With exception to the HBCU in this selective category, none of the colleges represented in this study have a culture of recruiting and providing specialized services for first generation or working class students. Many services exist on these campuses to support and engage students with faculty, advising, academic and social organizations; however, when students from racial/ethnic minority groups or less affluent socio-economic classes arrive on campus they are predominantly left to navigate structures of privilege on their own.

Ostrove's research demonstrates that there are personal and professional effects of social class background that persist well into adulthood and continue to shape assumptions related to belongingness (2003). Similar to Ostrove's earlier findings drawn from 1960s graduates from both Smith College and Radcliffe College, findings from this study show that the extent to which participants believed they belonged had a lot to do with socio-economic class background (2003). Chloe serves as the primary example, with Alice, Kate, and Sabrina adapting more readily to their environments in relation to their own aspirations for social mobility.

While Alice and Chloe both navigated college through a racial lens, as African American female students, Alice's private independent all-girls secondary background, partnered with her choice to attend a women's HBCU, enabled her to navigate spaces defined by sisterhood more easily. Alice and Chloe experienced college quite differently, though their current post-graduation trajectories are not all that different.

As relevant to social reproduction is the practice of downscaling aspirations among female college students where peer-group interactions favor a culture of romance over

academic and career pursuits, thus preparing women for subordinate roles (Luttrell, 1994). This was not the case for any of the women participants in this study where each felt free from expectations constraining field of study and occupation.

Luttrell's (1994) earlier findings provide a framework for thinking about the similarities and differences in how the women participating in this study interpreted their lives and projected their futures. Participant stories show us what it means to become somebody and how that looked different from the ground up than from the top down. While all participants' were expected to attend college and advance into adulthood thereafter, Kate's story is most profound in this context.

For Kate, leaving home and entering a new world that involved educational attainment literally meant becoming and being profoundly different from her family (Lucey et al., 2003). As cited in the findings, this journey involved mixed emotions and anxiety about the social aspects of college and adapting to a new, somewhat foreign, environment as well positive feelings that Kate expressed about her own academic and professional success.

The First Generation Experience

As stated earlier, unrelated to socio-economic background, regional difference, or level of family involvement in the college selection process, all eight participants were expected to attend college. Alice, Chloe, Kate, and Sabrina's stories provide examples of this variation among first-generation students. Alice's family made an investment in an independent private school single-sex education in order to prepare her for college. There was a "we" in her success academically while in high school and college, and professionally thereafter. In sharing her story, Alice said she never attended a public school because her mother's attitude toward

private schooling was that she was preparing her to go to college where she would get everything that she needed to excel in the world.

While neither attended college, Sabrina's parents expected that she would attend college and they relied on neighbors, teachers, coaches, and others as role models and advisors. Chloe's family and entire community of close-knit immigrants established very high expectations and collectively conveyed that attending college was a must.

Kate's journey was different and less supportive. She was raised and home-schooled in an isolated rural community. Her mother anticipated that she would attend college because she was bright and eager to explore the world. Kate's father was not supportive of an academic pursuit, reasons Kate attributes to taking a dim view of intellectuals in general; however, he did want her to get a degree and be able to support herself financially.

Kate indicated that by her senior year of high school she was happy to be able to participate in community activities, such as taekwondo, that weren't related to church because by that point she was feeling less comfortable with church. As presented in the data, Kate didn't believe that where she was from was a place to accomplish much of anything and created new opportunities by leaving. As also presented in the data, Kate grew more confident while in college.

In comparison to women in this study who were first generation, neither Edie, Jennifer, Nina nor Renee expressed feelings of academic or cultural unpreparedness, concerns about the college environment, or feeling socio-economically disadvantaged, even if they were not at the top of the class strata or were expected to make financial contributions to college expenses.

Juxtapose to the examples provided above where first generation women had awareness for the markers of belonging, these four women did not question their own sense of belonging.

Edie's education was primarily funded by her parents; whereas, Jennifer and Renee mixed financial aid packages that included scholarships, grants, and funds from their parents. Nina was expected to identify her own financial resources to cover college tuition and expenses and did so with portable tuition assistance, some assistance from her family, and working throughout all four years of college.

In summary, all eight participants were expected to attend college. Their decisions about where to attend were influenced by a variety of people, institutional structures and resources, as well as location and financial constraints. Assumptions about the purpose and outcomes of college were fairly consistent among participants. None of these women graduated with very much, if any, undergraduate student loan debt. Either through parental help in paying for college or through funding as the result of scholarship and aid packages, this meant that participants could start their adult lives with little or no debt.

Women's Colleges: Similarities and Differences

Recognizing the differences in selectivity between top tier and second tier Carnegie classifications, this section describes how women's experiences at second tier institutions are similar or different from those attending the top tier. The experiences described to me are similar in many respects to those described in the literature for women attending highly selective/top tier women's colleges.

Similar to top tier, academic rigor and high performance expectations were characteristic for women attending second tier institutions and college readiness played a large

part in their overall academic experience. As observed through Chloe's experience, K-12 preparation has a significant impact on both the academic and social aspects of college. Specifically, as Chloe described not relating to or having time for "sisterhood" which was perceived as a social privilege and something that she couldn't relate to.

While perceived notions of sisterhood varied among the women participating in this study, most agreed that sisterhood is defined by a women-centered environment focused on ideas of empowerment, confidence, and leadership. Within the context of selective women's colleges, sisterhood is further defined as knowing that a strong female-support network exists among women who share the same experience. As demonstrated by Chloe's experience, the concept of sisterhood was perceived as a social privilege.

Similar to how the single-sex environment is described for top tier women's colleges, Edie, Sabrina, and Nina each articulated differences between their single-sex undergraduate experiences in relation to the coed graduate programs that they subsequently attended. Each indicating feelings of advanced academic preparedness due to rigorous female-centered undergraduate programs and the "no-boundaries" approach at women's colleges. Similar to existing research, participants in this study attributed positive college experiences and their trajectories after graduation (graduate school, employment) to the women's centered environment. These findings align to Smith's (1990) research focused on measures of satisfaction, persistence toward degree attainment, and educational aspirations such as graduate school, attributing these outcomes to individual student characteristics, type of institution, and student experiences while in college (p. 184).

Similar to existing literature, all of the women participating in this study reported meaningful interactions with faculty, advisors, and mentors, as well as high levels of student satisfaction and aspirations to attend graduate school (Astin, 1977; Smith, 1990). As described in chapter four, six participants have or will soon complete advanced degrees. Of the participants in this study, Chloe and Edie have pursued STEM related fields. Additional similarities in this area include reported gains in self-confidence (Kinzie, et al. 2007). From the findings, Edie's experience supports this assumption, as do the academic experience for all other study participants, regardless of major.

A potential difference between top tier and second tier women's colleges could be found in how the single-sex environment is experienced based on geographic location. Specifically, from the literature women attending Smith, Radcliffe, and Wellesley did not articulate different experiences based on rural versus urban campus settings. Whereas, finding from this study suggest that women attending a women's college in an urban location felt less connected to their institution than those more isolated on rural campuses where options for cross-registration with coed programs and wider access to entertainment, socializing beyond the campus community, etc. were available.

In comparison to Ostrove's (2003) findings where some participants from affluent backgrounds felt a sense of intellectual entitlement and belonging, Renee and Sabrina both discussed campus cultures where students from more affluent backgrounds did not seem as indifferent toward class distinctions within their educational environments. While socio-economic and diversity differences did exist, none of the participants described class or race as defining factors on the non-HBCU campuses. Chloe was the only participant who expressed an

inability to relate to her college's predominant campus culture, but also indicated that this inability to related did not define her or her experience.

Conclusion

This chapter advances a discussion about belonging and becoming, the first generation experience, and similarities and differences between first and second tier women's colleges in order to understand women's experiences in a stratified women's college environment. These themes support earlier findings by Ostrove (2003) and Luttrell (1994) demonstrating that class background is an important factor related to how women experience college in the context of belonging and becoming. As further demonstrated in the discussion, decisions to attend a women's college hinged on feelings of belonging and fitting in, quintessential historic campuses with high-quality resources, academic rigor, and small college environment.

CHAPTER 6: CONCLUSION

This dissertation research moved beyond existing research about elite single-sex schooling to better understand the experiences for graduates of selective women's colleges, those in the second tier of the Carnegie Classification three-tier system. I used a conceptual framework of *Belonging and Becoming* and a constructivist grounded theory approach as a way to explore women's educational experiences in a stratified women's college environment. By asking how female students attending second tier women's colleges experience the single-sex environment we now understand that women navigate second tier women's colleges in similar ways to women attending elite women's colleges. From this, we gained a better understanding of, and expanded our knowledge about, the role and impact of women's colleges.

Findings support that female students attending second-tier women's colleges experience the single-sex environment very similarly to peers attending top tier women's colleges. Six out of eight participants reported positive college experiences as a result of the single-sex environment. The main conceptual ideas to emerge from this piece of the study relate to the concept of belonging and becoming, the experience of first generation students, and the similarities and differences between top tier and second tier women's colleges.

Within the context of belonging and becoming, findings support that while socio-economic class markers exist and are acknowledged on second-tier campuses, they do not limit women's sense of belonging or their aspirations. Some first generation students experienced the women's college environment differently, while others revealed more similarities than differences. Finding shows that women attending second-tier women's colleges can end up in

the same place as peers who attended top tier women's colleges. In part, due to similar networks providing entry to opportunities beyond college. For example, Jennifer's Ivy League fellowship and for others, entry to master's level degree programs at highly selective private institutions (not named to protect the participant identity). Finally, data from this particular sample indicate that there are more similarities than differences among women attending second-tier institutions and their peers from top tier women's colleges.

It is important to understand the implications of a diminishing number of women's colleges. Today, less than two percent of female college graduates attended a women's college (Women's College Coalition, 2017). Findings from this study support that students attending selective women's colleges in the United States are offered a uniquely different experience as the result of a commitment to their emotional and intellectual development not available in coeducation environments. As cited earlier, many women's colleges became coeducational in the wake of financial strain and the belief that coeducation was better while disregarding evidence that women who attended women's colleges were more satisfied with their overall experience (Smith, 1990; Riordan, 1994). In this context, women's colleges still matter in the current higher education landscape for female students who can benefit from the single-sex environment.

By using a constructivist grounded theory approach I was able to focus on how participants explain and make meaning of their experience so that we could learn from them. In doing so we have a better understanding of the role class plays in constructing the markers that define belongingness for women attending selective women's colleges and the attributes that helped them become the women they aspire to be.

Emerging from this study are two key areas for consideration in future research. Gaining a better understanding about the implications of course cross-registration between women's college students and peer attending coeducation institutions would be valuable to understanding the viability of women's colleges. Furthermore, cross-registration seems to have some negative affect on the women in this study who cross-registered and it would be value to know more. Additionally, gaining more insight into the strength of women's college networks would be helpful to understanding their value post-graduation.

In conclusion, it is important to consider the gap this research fills to understanding the experience of women attending second-tier women's colleges in relation to the similarities and differences for peers who attend top-tier women's colleges. Knowing that selectivity criteria is only one marker to differentiate between the two student populations and that their experiences are similar across the main conceptual ideas found in this study, helps us expand our knowledge about the continued role and impact of women's colleges.

Appendix A. Interview Guide

An interview guide comprised of three sections was designed to provide in-depth information related to participants' experiences in a single-sex women's college environment. Standardized open-ended interview was the interview design chosen for this study for its structure as related to the wording of the questions (Seidman, 2013). In this design, participants were asked a series of identical questions that were worded for open-ended responses. The open-ended nature of the questions allowed participants to fully express their viewpoints and experiences, while still providing me a chance to follow up with probing questions (Seidman, 2013). Interviews were conducted via Skype or phone. Interviews were audio recorded and transcribed into written notes for accuracy. Interview questions were designed to prompt participants to do most of the talking, starting with broad questions, and then narrowing to specifics.

Interview 1 – Focused Life History

Opening comments:

Thank you for participating in my study. The purpose of this study is explore women's experiences in selective single-sex academic environments. I am excited to hear about your experience at (insert name of institution).

Let's start with some general background information. To provide context to later questions about the details of your college experience, let's start with some background questions.

Q1: Tell me about yourself, where you are from, where you've been.

Prompts if needed.

- a. How would you describe the community/neighborhood/place where you grew up?
- b. Where do you live now? Where have you lived in between? Describe those places.

Q2: Tell me about your educational history.

- a. Where did you go to school? What kind of school was that?
- b. What was high school like?
- c. What kind of activities were you involved in during high school?

Q3: When you were growing up were there expectations about going to college?

- a. What were they?
- b. How were they communicated to you?

Q4: Tell me about your decision to attend your alma mater. Where did you go?

- a. How did you make the decision to attend a women's college?
- b. What other colleges did you consider?
- c. Why did you choose [your alma mater]?

Q5: What was your experience like at [your alma mater]?

- a. What kinds of activities and social groups were you engaged in during the academic year? Summers?
- b. How were you involved?
- c. Why did you choose these activities?

Q6: What was the classroom environment like?

Q7: What was the social life like?

Q8: Tell me about the types of opportunities for leadership that you experienced.

- a. What types of opportunities were available in the classroom to assume a leadership role? i.e. group/project leader, assist faculty with research, etc.
- b. What types of extra curricular opportunities were available to assume a leadership role? i.e. officer of club, captain of team, etc.

Q9: What was your major? Any minor?

- a. Tell me about your decision to pursue this particular field of study.
- b. Please reiterate when you graduated.

Q10: What were your expectations for formal and informal networks post-graduation?

- a. What kinds of professional or work-related groups do you engage with, participate in, are a member of, etc.?
- b. Who do you talk with about work-related issues, in work and outside of work? Why them?
- c. Describe the aspects of your formal and informal network that you feel are attributed to having studied at, and been affiliated with, your alma mater.
- d. Why? What is the relationship with your alma mater?

Q11: How did you decide to pursue your chosen career?

Q12: What types of opportunities for leadership and advancement have you experienced in your job or field?

- a. Have you been promoted and/or how has your job has changed over time?
- b. Do you feel that you have advanced at the rate expected when you graduated? How so? If not, why?

Q13: Describe the aspects of your formal and informal network, career choice, leadership opportunities, and salary.

a. How are they related to having studied at, and been affiliated with, your alma mater.

Q14: Tell me about your personal and family life. How is it different or similar to what you expected it would be post-graduation?

Interview 2 - The Details of the Experience

Opening comments:

Thank you for meeting/talking with me again today to continue the interview sequence.

During the last interview, I was able to learn about your background, choice to attend your alma mater, and general experiences while a student and post-graduation. Today I am interested in diving deeper into the day-to-day and year-to-year details of your experience at your alma mater.

Q1: What was your alma mater like when you first arrived?

- a. What was your first impression?
- b. Had you visited beforehand? If so, explain that experience.
- c. Who were your friends? When and how did you make friends?
- d. What was it like to navigate the new place?

Q2: How did you feel about being there?

- a. About being in college in general?
- b. About being away from home?
- c. About being at a women's-only college?

Q3: Were the reasons contributing to your decision to attend your alma mater holding true?

(my notes, will not lead i.e. faculty engagement, gendered conscious community, formal and informal leadership opportunities inside and outside the classroom , etc.)

Q4: How did your experience change from year-to-year?

- a. How did your confidence grow or change (or not), as you advanced as an upper classwoman?
- b. How did your social network grow/change?
- c. How did it change from year-to-year? Did it get bigger or contract over time? People come and go, what led to your including some and not others? Why?

Q5: What were your favorite things about the single-sex environment?

Q6: Were most students at your alma mater from similar backgrounds as you? If not, explain.

Q7: What was the classroom environment like?

Q8: What was the level of faculty engagement? How accessible were they to you in an academic capacity? In an advising capacity?

Q9: How did you get involved in school activities?

- a. Which ones? Why? How did you find out about them?
- b. Tell me about your experiences with different groups and organizations.

Q10: Do you feel that you had opportunities to explore subjects in traditionally male dominated fields? (STEM). If so, what were they? How did you explore them? If not, why not?

Q11: What were the advising and career resources available to you like?

- a. Have you needed them? Why, why not? What were the results?

Q12: Do you feel that the single-sex educational environment had any influence over your career choice? How so?

Q13: How was socializing similar or different from year-to-year?

Q14: If she has a background in coeducation from high school (discovered in interview one), I will ask: Based on your experiences in coeducational situations (schooling, sports, clubs, etc.), did you find socializing to be different in a women-only environment?

Q15: Tell me about your experience and perception of confidence building provided by the single-sex environment. What other types of scenarios do you have to compare your experience to?

Q16. Where would you place yourself on the class spectrum when you were a student? i.e. working class, middle-class, upper-class.

Interview 3 - Reflection on the Meaning

Opening comments:

Thank you for meeting/talking with me again today to conclude the interview sequence. During the previous two interviews, I was able to learn about your background and experience as a student, then as an alumnae, of your alma mater. Today I am interested in learning more about the connections between your experience then and your life now. How it all fits together, making sense of it, if you will.

Q1: Tell me about your personal stories post-graduation. What have been your proudest and/or most defining moments in your personal life?

Q2: How would you describe your college experience in relation to your life now? To what extent do you feel college influenced your path?

Q3. What did you do after college?

Q4: Did you feel prepared for your next step (employment, graduate study, life) by your alma mater? How so? Why not?

Q5: Based on your experience post-graduation, did you feel better prepared than your peers from other institutions in the workplace or academic environment (coed or single-sex)? How so? Tell me some of your workplace stories.

Q6: What types of formal and informal networks were made available to you post-graduation? Have you used them? How so?

Q7: What types of leadership opportunities have you taken advantage of since graduation?

- a. Have you joined the alumni group or taken a leadership role? If so, in what capacity? If not, why?
- b. Have you volunteered with the college in any other capacity? i.e. fundraising, board, etc. If so, how? If not, why?
- c. Have you taken on leadership roles in your community? i.e. kids school, religious organizations, fundraising or advocacy for a cause, etc.

Q8: What has your career trajectory been since graduation?

Q9: Are you doing what you want to be doing professionally?

Q10: If so, how much of this would you attribute to your undergraduate preparation and environment? If not, what could the college have done to assist you?

Q11: Is there anything else that you want to add about your experience at your alma mater?

Closing comments:

To further enhance my analysis I am interested in collecting demographic information if you are comfortable with it.

Q11: How old are you now?

Q12: Per the U.S. Census Bureau Household Income scale, which range fits your family household income while growing up? Your individual income and net-worth now?

Under \$25,000

\$25,000 - \$49,999

\$50,000 - \$74,999

\$75,000 - \$99,999

\$100,000 - \$149,999

\$150,000 - \$199,999

\$200,000+

Q13: How did your education influence your socio-economic status? Or were you born into it?

Thank you for your time and contribution to my research. I look forward to connecting with you one final time via telephone to clarify any final points and to ensure accuracy in my final report.

Appendix B. IRB Approval Memo

DEPAUL UNIVERSITY



Office of Research Services
Institutional Review Board
1 East Jackson Boulevard
Chicago, Illinois 60604-2201
312-362-7593
Fax: 312-362-7574

Research Involving Human Subjects NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

To: Staci H. Zake, Graduate Student, College of Education

Date: February 2, 2016

Re: Research Protocol #SZ120815EDU
"Gender & Education: Experiences at Women's Colleges"

Please review the following important information about the review of your proposed research activity.

Review Details

This submission is an initial submission. Your research project meets the criteria for Expedited review under 45 CFR 45 CFR 46.110 under the following categories:

"(6) Collection of data from voice, video, digital, or image recordings made for research purposes."

"(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program

Approval Details

Your research was originally reviewed on December 15, 2015 and revisions were requested. The revisions you submitted on January 7, 2016 were reviewed on January 28, 2016 and further revisions were needed. The revisions you submitted on February 1, 2016 were reviewed and approved on February 2, 2016.

Approval Period: February 2, 2016 – January 31, 2017

Approved Consent, Parent/Guardian Permission, or Assent Materials:

- 1) Adult Consent, version date February 1, 2016 (**attached**)

Other approved study documents:

- 1) Initial Phone Recruitment Script, version date February 1, 2016 (**attached**)
- 2) Cover letter/Email Script for Recruitment, version date February 1, 2016 (**attached**)
- 3) Email Script to Confirm Interviews, version date February 1, 2016 (**attached**)
- 4) Email Script to Distribute Consent form, version date February 1, 2016 (**attached**)
- 5) Flyer/Notice Recruitment, version date February 1, 2016 (**attached**)
- 6) Phone Script to Confirm Interviews, version date February 1, 2016 (**attached**)
- 7) Thank You Email, version date February 1, 2016 (**attached**)

Number of approved participants: 12 Total

You should not exceed this total number of subjects without prospectively submitting an amendment to the IRB requesting an increase in subject number.

Funding Source: 1) None

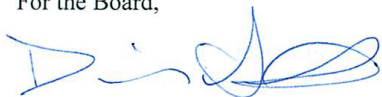
Approved Performance sites: 1) DePaul University

Reminders

- Only the most recent IRB-approved versions of consent, parent/legal guardian permission, or assent forms may be used in association with this project.
- Any changes to the funding source or funding status must be sent to the IRB as an amendment.
- Prior to implementing revisions to project materials or procedures, you must submit an amendment application detailing the changes to the IRB for review and receive notification of approval.
- You must promptly report any problems that have occurred involving research participants to the IRB in writing.
- If your project will continue beyond the approval period indicated above, you are responsible for submitting a continuing review report at least 3 weeks prior to the expiration date. The continuing review form can be downloaded from the IRB web page.
- **Once the research is completed, you must send a final closure report for the research to the IRB.**

The Board would like to thank you for your efforts and cooperation and wishes you the best of luck on your research. If you have any questions, please contact me by telephone at (312) 362-7592 or by email at dalfaro@depaul.edu.

For the Board,



Diana Alfaro, MS
Assistant Director of Research Compliance
Office of Research Services

Cc: Karen Monkman, Ph.D., Faculty Sponsor, College of Education

Appendix C. Women's Colleges (*as of 3/2017*)

<p>Agnes Scott College, Decatur, GA</p> <p>Alverno College, Milwaukee, WI</p> <p>Barnard College, New York, NY</p> <p>Bay Path University, Longmeadow, MA</p> <p>Bennett College (HBCU), Greensboro, NC</p> <p>Brenau University, Gainesville, GA</p> <p>Bryn Mawr College, Bryn Mawr, PA</p> <p>Cedar Crest College, Allentown, PA</p> <p>College of Saint Benedict, St. Joseph, MN</p> <p>Columbia College, Columbia, SC</p> <p>Converse College, Spartanburg, SC</p> <p>Cottey College, Nevada, MO</p> <p>Douglas Residential College at Rutgers University, New Brunswick, NJ</p> <p>Hollins University, Roanoke, VA</p> <p>Judson College, Marion, AL</p> <p>Mary Baldwin College, Staunton, VA</p> <p>Meredith College, Raleigh, NC</p> <p>Mills College, Oakland, CA</p> <p>Moore College of Art and Design, Philadelphia, PA</p> <p>Mount Holyoke College, South Hadley, MA</p>	<p>Mount St. Mary's College, Los Angeles, CA</p> <p>Notre Dame of Maryland University, Baltimore, MD</p> <p>Russell Sage College, Troy, NY</p> <p>Saint Mary's College, Notre Dame, IN</p> <p>Salem College, Winston-Salem, NC</p> <p>Scripps College, Claremont, CA</p> <p>Simmons College, Boston, MA</p> <p>Smith College, Northampton, MA</p> <p>Spelman College (HBCU), Atlanta, GA</p> <p>St. Catherine University, St. Paul, MN</p> <p>Stephens College, Columbia, MO</p> <p>Sweet Briar College, Sweet Briar, VA</p> <p>Texas Women's University</p> <p>Trinity Washington University, Washington, DC</p> <p>University of Saint Joseph, West Hartford, CT</p> <p>Wellesley College, Wellesley, MA</p> <p>Wesleyan College, Macon, GA</p>
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Source: Women's College Coalition. 2017. Find a College. <http://womenscolleges.org/colleges>

References

- American Association of University Women (AAUW). 1992. *How Schools Shortchange Girls Executive Summary*. Washington, DC: AAUW Educational Foundation.
- Arum, Richard and Josipa Roksa. 2011. *Academically Adrift: Limited Learning on College Campuses*. Chicago: The University of Chicago Press.
- Astin, Alexander W. 1977. *Four Critical Years*. San Francisco: Jossey-Bass.
- Barnard College. 2014. About. History. <http://barnard.edu/about/womens-college/history>
- Beede, David, Tiffany Julian, David Langdon, George McKittrick, Beethika Khan, and Mark Doms. 2011 (August). Women in STEM: A Gender Gap to Innovation. ESA Issue Brief #04-11. U.S. Department of Commerce. Economics and Statistics Administration (ESA), Washington, DC.
- Belenky, Mary Field, Blythe McVicker Clinchy, Nancy Rule Goldberger, and Jill Mattuck Tarule. 1997. *Women's Ways of Knowing: The Development of Self, Voice, and Mind* (10th Year Edition). New York: Basic Books.
- Bloom, Benjamin S. 1956. *Taxonomy of Educational Objectives: Handbook I: The Cognitive Domain*. New York: David McKay Co. Inc.
- Bloomberg, Linda Dale and Marie Volpe. 2012. *Completing Your Qualitative Dissertation: A Road Map from Beginning to End*, 2nd Edition. Thousand Oaks, CA: Sage.
- Boss-Bicak, Shira. 2009. "25 Years of Coeducation." *Columbia College Today*. Online archive. http://www.college.columbia.edu/cct/jul_aug09/features1
- Bourdieu, Pierre. 2011. "The Forms of Capital (1986)." In Imre Szeman and Timothy Kaposy, Eds., *Cultural Theory: An Anthology*, 81-93. Malden, MA: Wiley-Blackwell.
- Bryn Mawr College. 2014. About. A Brief History of Bryn Mawr College. <http://www.brynmawr.edu/about/history.shtml>
- Carnegie Classification of Institutions of Higher Education. 2015. Interim Site. Custom Listings. http://carnegieclassifications.iu.edu/lookup_listings/custom.php
- Charmaz, Kathy. 2000. "Grounded Theory: Objectivist and Constructivist Methods." In Norman K. Denzin & Yvonna S. Lincoln, Eds., *Handbook of Qualitative Research*, 2nd Edition, 509-535. Thousand Oaks, CA: Sage.
- Charmaz, Kathy. 2014. *Constructing Grounded Theory*, 2nd Edition. Thousand Oaks, CA: Sage.
- Clarke, Rebecca Grandstaff. 2011. *Giving Voice to Student and Alumnae Opposition During the Transition to Coeducation by a College for Women*. PhD diss., Virginia Commonwealth University.
- Coontz, Stephanie. 1992. *The Way We Never Were: American Families and the Nostalgia Trap*. New York: Basic Books.

- Corbin, Juliet M. and Anselm L. Strauss. 1990. "Grounded Theory Research: Procedures, canons, and evaluative criteria." *Qualitative Sociology* 13(1), 3-21.
- Creswell, John W. 2009. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, 3rd Edition. Thousand Oaks, CA: Sage.
- Crosby, Faye, Brenda Allen, Tonya Culbertson, Catherine Wally, Jennifer Morith, Renee Hall, and Bobbe Nunes. 1994. "Taking Selectivity into Account, How Much Does Gender Composition Matter? A Re-Analysis of M.E. Tidball's Research." *NWSA Journal* 6(1), 107-118.
- Dewey, John. 1916. *Democracy and Education*. New York: Macmillan.
- Friedan, Betty. 2001. *The Feminine Mystique*. New York: W.W. Norton & Co.
- Gilligan, Carol. 1982. *In a Different Voice*. Cambridge, MA: Harvard University Press.
- Gilligan, Carol. 2011. *Joining the Resistance*. Malden, MA: Polity Press.
- Glaser, Barney G. and Anselm L. Strauss. 1967. *The Discovery of Grounded Theory*. Chicago, IL: Aldine.
- Hacker, Andrew and Claudia Dreifus. 2010. *Higher Education? How Colleges Are Wasting Our Money And Failing Our Kids – And What We Can Do About It*. New York: Henry Holt.
- Hall, Roberta M. and Bernice R. Sandler. 1982. *The Classroom Climate: A Chilly Climate for Women?* Washington, DC: Association of American Colleges.
- Harwarth, Irene, Mindi Maline and Elizabeth DeBra. 1997. *Women's Colleges in the United States: History, Issues, and Challenges*. National Institute on Postsecondary Education, Libraries, and Lifelong Learning. Washington, DC: U.S. Department of Education.
- Hendry, Petra. 2011. *Engendering Curriculum History*. New York: Routledge.
- Higher Education Research Institute at the University of California. 2014. About. Staff Members / Affiliated Scholars.
http://www.heri.ucla.edu/affiliated_scholars.php#ALEXANDER%20ASTIN
- Jacobs, Jerry A. 1996. "Gender Inequality and Higher Education." *Annual Review of Sociology* 22, 153-185.
- Kim, Mikyong M. 2002. "Cultivating Intellectual Development: Comparing Women-Only Colleges and Coeducational Colleges for Educational Effectiveness." *Research in Higher Education* 43(4), 447-481.
- Kim, Mikyong M. and Rodolfo Alvarez. 1995. "Women-Only Colleges: Some Unanticipated Consequences." *Journal of Higher Education* 66(6), 641-668.
- Kinzie, Jillian. 2007. "Women's Paths in Science: A Critical Feminist Analysis." *New Directions for Institutional Research* 133, 81-93.
- Kinzie, Jillian, Auden Thomas, Megan Palmer, Paul Umbach and George Kuh. 2007. "Women Students at Coeducational and Women's Colleges: How Do Their Experiences Compare?" *Journal of College Student Development* 48(2), 145-165.

- Langdon, Emily A. 2001. "Women's Colleges Then and Now: Access Then, Equity Now." *Peabody Journal of Education* 76(1), 5-30.
- Lincoln, Yvonna S. and Egon G. Guba. 1985. *Naturalistic Inquiry*. Newbury Park, CA: Sage.
- Lucey, Helen, June Melody and Valerie Walkerdine. 2003. "Uneasy Hybrid: Psychosocial Aspects of Becoming Educationally Successful for Working-Class Young Women." *Gender and Education* 15(3), 285-299.
- Luttrell, Wendy. 1994. "Becoming Somebody: Aspirations, Opportunities, and Womanhood." In Gay Young and Bette J. Dickerson, *Color, Class & Country: Experiences of Gender*. 17-35. Atlantic Highlands, NJ: Zed Books Ltd.
- Martusewicz, Rebecca A., Jeff Edmunson and John Lupinacci. 2011. *Ecojustice Education: Toward Diverse, Democratic, and Sustainable Communities*. New York: Routledge.
- Miller-Bernal, Leslie. 1993. "Single-Sex versus Coeducational Environments: A Comparison of Women Students' Experiences at Four Colleges." *American Journal of Education* 102, 24-54.
- Mills College. 2014. About Mills. Our Mission, Our History. http://www.mills.edu/about/mission_and_history.php
- Mount Holyoke College. 2014. About. History. <https://www.mtholyoke.edu/about/history>
- National Survey of Student Engagement (NSSE). 2011. http://nsse.iub.edu/NSSE_2011_Results/pdf/NSSE_2011_AnnualResults.pdf#page=11
- Nelson, Donna J. and Diane C. Roger. 2004. "A National Analysis of Diversity in Science and Engineering Faculties at Research Universities." National Organization for Women. Washington, DC.
- Noddings, Nel. 2007. *When School Reform Goes Wrong*. New York: Teachers College Press.
- Noddings, Nel. 1984. *Caring*. Berkeley, CA: University of California Press.
- Oberlin College & Conservatory. 2013. About. History. <http://new.oberlin.edu/about/history.dot>
- Oates, Martha J., and Susan Williamson. 1978. "Women's Colleges and Women Achievers." *Signs: Journal of Women in Culture and Society* 3, 795-806.
- Ostrove, Joan M. 2003. "Belonging and Wanting: Meanings of Social Class Background for Women's Constructions of their College Experiences." *Journal of Social Issues* 59(4), 771-784.
- Ostrove, Joan and Abigail J. Stewart. 1998. "Representing Radcliffe: Perceptions and Consequences of Social Class." *Journal of Adult Development* 5, 83-193.
- Pascarella, Ernest T., Elizabeth J. Whitt, Marcia I. Edison, Amaury Nora, Linda Serra Hagedorn, Patricia Yeager, and Patrick T. Terenzini. 1997. "Women's Perceptions of a Chilly Climate and their Cognitive Outcomes During the First Year of College." *Journal of College Student Development* 38, 109-124.

- Randolph College. 2014. About. History & Legacy.
<http://www.randolphcollege.edu/about/history-and-legacy/>
- Rice, Joy K. 1990. "Separation and the Education of Women." *Initiatives* 53(3), 53-55.
- Riordan, Cornelius. 1994. "The Value of Attending a Women's College: Education, Occupation, and Income Benefits." *Journal of Higher Education* 65(4), 486-510.
- Rothstein, Donna S. 1995. "Do Female Faculty Influence Female Students' Educational and Labor Market Attainments?" *Industrial Labor Relations Review* 48(3), 515-530.
- Schram, Thomas H. 2006. *Conceptualizing and Proposing Qualitative Inquiry*, 2nd Edition. Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.
- Schwartz Seller, Maxine. 1989. "A History of Women's Education in the United States: Thomas Woody's Classic—Sixty Years Later." *History of Education Quarterly* 29(1), 96-107.
- Seidman, Irving. 2013. *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*, 4th Edition. New York: Teachers College Press.
- Smith College. 2014. About Smith. History. <http://www.smith.edu/about-smith/smith-history>
- Smith, Daryl G. 1990. "Women's Colleges and Coed Colleges: Is There a Difference for Women?" *Journal of Higher Education* 61(2), 181-197.
- Smith, Daryl G., Lisa E. Wolf and Diane E. Morrison. 1995. "Paths to Success: Factors Related to the Impact of Women's Colleges." *Journal of Higher Education* 66(3), 245-266.
- Stewart, Abigail J. and Joan M. Ostrove. 1993. "Social Class, Social Change, and Gender: Working Class Women at Radcliffe and After." *Psychology of Women Quarterly* 17, 475-497.
- Studer-Ellis, Erich M. 1995. "Springboards to Mortorboards: Women's Colleges Foundings in Massachussetts, New York, and Pennsylvania." *Social Forces* 73, 1051-1070.
- The Council for Aid to Education (CAE). 2011. <http://cae.org/about/category/home/>
- Thompson, Jennifer S. 2003. "The Effect of Single-Sex Secondary Schooling on Women's Choice of College Major." *Sociological Perspectives* 46(2), 257-278.
- Tidball, M. Elizabeth. 1973. "Perspective on Academic Women and Affirmative Action." *Educational Record* 54, 130-35.
- Tidball, M. Elizabeth. 1980. "Women's Colleges and Women Achievers Revisited." *Signs: Journal of Women in Culture and Society* 5(3), 504-517.
- Vassar College. 2014. Office of Communications. History of Vassar.
<http://collegerelations.vassar.edu/history/>
- Wang, Hongyu. 2008. "The Strength of the Feminine, the Lyrics of the Chinese Woman's Self, and the Power of Education." In Claudia Eppert and Hongyu Wang, Eds., *Cross-Cultural Studies in Curriculum*, 313-333. New York: Routledge.

Wellesley College. 2014. About. College History.

<http://www.wellesley.edu/about/collegehistory>

Women's College Coalition. 2017. Find a College. Get the Facts. Why a Women's College.

<http://womenscolleges.org>

Woody, Thomas. 1929. *The History of Women's Education in the United States*. New York: The Science Press.